



PROCEEDINGS

and

ADDRESSES

of

The American Philosophical Association

1937

VOLUME XI

of the combined proceedings and addresses
of the several divisions

THE LIBRARY OF THE
APR 2 - 1938
UNIVERSITY OF ILLINOIS

Printed from THE PHILOSOPHICAL REVIEW, Vol. XLVII, No. 2, March, 1938

10
A
1

W

L

In
o
g
l
b
n
th
d
v
o
n
p
d
1937

th
n
e
n
p
r
a
h
v
20458
ic

106

AM

1937

Number 2

Volume XLVII

THE LIBRARY OF THE

APR 2 - 1938

UNIVERSITY OF ILLINOIS
March, 1938

Whole

Number 278

THE PHILOSOPHICAL REVIEW

PEIRCE, MEAD, AND PRAGMATISM¹

I

IN recent years we have had spread before us the results of the intellectual labors of Charles S. Peirce and George H. Mead. In the same period John Dewey has rounded out the implications of his views for esthetics, religion, and political theory, and has given us a glimpse of the reformulation and systematization of his logical doctrine. William James' mode of thought has been kept before us by Ferdinand Schiller's collection of his own later cosmological essays, and by the full length portrait of James' life and thought painted in words by Ralph Barton Perry. C. I. Lewis has devoted himself to the theory of knowledge from the point of view which he calls "conceptualistic pragmatism". And a number of characteristic pragmatic theses have begun to show their familiar faces in the writings of American and European philosophers of science—especially among the logical empiricists and the defenders of operationalism.

In terms of this deluge of new material, representing as it does the main interests and the main thinkers in the pragmatic movement, the task of appraising America's most distinctive philosophic expression is rendered at once more easy and more difficult. It is more difficult because the very richness of the material makes impossible the facile explanations, acceptances, and damnations which ran riot during the futile decades in which discussion centered almost exclusively around the concept of truth. Those decades are happily past, and the phoenix which has arisen from the ashes reveals herself as a much more luxuriant creature. We find ourselves

¹ Presidential address to the western division of the American Philosophical Association, Knox College, April 23, 1937. Footnotes have been added.

confronted with the task of assessing a distinctive version of empiricism, an extensive logical tradition, a developed theory of value, a comprehensive formulation of ethics and social philosophy, a detailed theory of mind, and a minutely elaborated cosmology. And this is a more difficult task than either the friends or the enemies of the pragmatic movement have hitherto set themselves. Indeed, the relevant critical task has hardly been envisaged, to say nothing of being performed.

Yet in another sense, the recent literature has made the task of assessment easier. It becomes clearer than ever before that there is a sustained unity to the pragmatic movement. Pragmatism reveals itself in all its phases as a series of constantly deepening analyses of a single set of theses. The differences between the leading representatives are primarily variations on a common theme, variations in part dictated by differences in fields of interest and application. There are genuine differences to be sure, but these too are often merely differences as to the permissible range of extension of a doctrine otherwise held in common. Pragmatism comes thus to take on an integrated character. One has the sense of a complex philosophic tapestry which has been woven through coöperative enterprise. The movement has in our day achieved something of an esthetic culmination, like a fine conversation which has worked itself out to its natural termination.

It is not of course possible on this occasion to attempt either of the tasks which the pragmatic movement makes imperative. We can neither try to show the systematic contours of pragmatism nor critically to estimate it as a whole. But as a step in these directions, it has seemed worth while to compare and contrast Peirce and Mead in certain selected respects. The American philosophical public is now at work digesting the published results of these thinkers, but as yet little has been written on the men individually, and nothing, so far as I know, of a comparative sort. The selection to be made also has the advantage of drawing attention to the somewhat neglected cosmological theories of the pragmatists in relation to the constant consideration by such thinkers of the general theory of signs. The fact that no obvious influence of Peirce on Mead is discernible, coupled with the fact that Peirce approached his problems as a logician while Mead

approached his as a social psychologist, makes more significant their convergences and their differences. It is believed, further, that this comparison of the earliest and the latest stage of pragmatism makes the continuity and the discontinuity of the development stand out vividly, and provides a basis for evaluating the change that has taken place from the metaphysical idealism of Peirce through the radical empiricism of James to the empirical naturalism of Dewey and Mead. The lines of this evolution likewise throw light on the possible future of the pragmatic movement.

II

Even the most superficial sampling of the writings of Peirce and Mead reveals certain striking similarities between the thought of the two men. Mead held that "philosophy is concerned with the import and presence in the universe of human reflective intelligence". Peirce and Mead, in common with all pragmatists, were led to their views by a consideration of the phenomenon of reflective intelligence—as perhaps was Aristotle in an earlier age. This is in a sense the center with reference to which all pragmatic doctrines form an ever-expanding series of circumferences. A consideration of reflective intelligence suggests a number of important consequences: it leads to attaching central importance to the theory of signs—and both Peirce and Mead spent a large part of their life in the elaboration of this discipline; it inevitably raises questions as to the relation of signs and thought—and both men shared the view that there is no thought without signs; it demands an answer in post-Darwinian days as to the relation of thought and organic action—and both men insisted that thinking functions in the context of interested action as an instrument in the realization of sought values. The consideration of reflective thinking provokes queries as to the relation of thought to empirical data—and the common answer was given that all thought must find its ultimate validation in terms of such data; such consideration sensitizes the inquirer to the phenomenon of universality—and both Peirce and Mead aim adequately to take account of the objectivity of universality, generality, law; it seems to indicate that the envisagement of ends is a genuine factor in the attainment of these ends—and both philosophers insisted upon the

reality of final causes, defending the objectivity of teleology, chance, and novelty against any type of mechanistic theory which would take from mind its rôle as an active agent. The study of reflective thinking inevitably draws attention to the social aspect of thought—and both men held in high respect the category of the social, discerning in the universe wider social processes of which the sociality of the human mind is a particular manifestation; finally, such study raises doubts as to the validity of any form of dualistic separation of mind and the world—and both Peirce and Mead chop at the roots of the lingering traces of Cartesianism and present a universe unfractured by the dichotomies of subjective experience and external nature, quality and quantity, mind and matter, mechanism and purpose.

So it is that the earliest and latest phases of pragmatism show significant agreement on basic issues. There is presented an expanded and renovated empiricism which has relinquished the individualistic, subjectivistic, sensationalistic, and nominalistic extremes of late British empiricism; linked with this empiricism is an evolutionary cosmology, constructed with minute fidelity to modern physical and biological science, but in which mechanical law has not squeezed out novelty, chance, or purpose; while the keystone of the arch is found in a theory of mind in terms of which mind is at once set in the framework of interested action and yet linked with things in such a way that envisaged ends are concretized into embodied actualities.

Nevertheless, in spite of these basic convergences, the same superficial sampling also discloses profound divergences which at first glance perhaps obscure the fact that the differences are more as to the range of applicability of a doctrine than as to the doctrine itself. Peirce shows more the mentality of the traditional metaphysician; Mead writes more as a scientist. Peirce discusses fully the doctrines of pragmatism and the empirical theory of meaning, but often fails to live up to his own methodological precepts; Mead does not write much concerning these topics, but his thinking moves more firmly within a pragmatic and empirical orbit. One characteristic of the metaphysical type of mind—perhaps the dominant characteristic—is to note the existence of series and then to affirm the existence of the limits of these series. Some

No.

thing
lute
absol
anot
whic
purp
this
valu
ing i
term
more
of a
He s
cepti
cann
cepts
bound
comm
very
an a
of a
Mead
natur
is ch

TH
contr
intell
that
laws
maki
the c
"the
admi
every
and
term
assign

*C

things are better than other things—hence there must be an absolute best; one theory is truer than another—hence there is one absolutely true theory; one perspective is more embracing than another—hence there is an absolute perspective; there are purposes which include subordinated purposes—hence there is one final purpose to which all things move. Peirce's writings show strongly this metaphysical tendency: truth, reality, meaning, probability, value are all defined in terms of the "long run". Mead's thinking is by contrast contextual or situational; he defines all of these terms in reference to specific contexts and situations. He agrees more with the attitude of the mathematician that the existence of a series in itself gives no assurance that the series has a limit. He stresses the point that while science approximates to the conception of the world at an instant, the existence of such a limit cannot be reached without rendering meaningless the very concepts which science employs. And while Mead sets no practical bound to the degree to which thought may symbolically embrace common features of a plurality of existential perspectives, the very nature of a perspective as he conceives it makes impossible an actual single all-inclusive perspective, so that the metaphysics of absolute idealism is closed to him as it was not to Peirce. Mead's system accounts in various ways for the organization of nature, but not at the expense of the fundamental pluralism which is characteristic of his thought.

The mention of idealism furnishes another way to bring out the contrast. We are all familiar with Peirce's dictum that "the one intelligible theory of the universe is that of objective idealism, that matter is effete mind, inveterate habits becoming physical laws".² Thinking of mind as the operation of final causes, and making liberal use of the principle of continuity, Peirce extends the operation of mind to the cosmic scale, so that mind becomes "the fountain of existence" (VI.61). Mead, on the contrary, while admitting that mind is a particular form of processes which everywhere occur, insists more sharply on the biological, social, and linguistic preconditions of mind, with the result that the term 'mind' is not extended so widely: mental processes are not assigned throughout nature, and mind, though one active factor

² *Collected Papers*, VI. 25 (Harvard University Press).

in the organization of nature, can in no sense be said to be the general source of existence. Mead's account is thus more naturalistic than Peirce's, and the principle of discontinuity is treated with as much respect as the principle of continuity.

Peirce's statement that mind is the fountain of existence recalls another characteristic feature of his cosmology, namely, his tendency to conceive of possibility, existence, and law as constituting three "Realms of Being" or "Universes of Experience" parallel to the three categories (Firstness, Secondness, Thirdness) and the three kinds of signs (Icon, Index and Symbol). Although Peirce often stresses the interdependence of the three categories, yet in practice his cosmology tends to fall apart into realms, and we are presented with a description of the world as a process by which mind (as Thirdness) converts possibility (Firstness) into determinate forms of existence (Secondness). There is thus a decided tendency to hypostatize the eternal possibilities, the laws which control the characters and relations of existences, and the final causes which direct the process into an embodiment of "concrete Reasonableness". No such tendency is found in Mead. The reality of possibility, law, and the efficacy of mind are admitted, but as we shall see later, they are integrated by Mead's distinctive concept of the act and his resulting objective relativistic cosmology.

As a final way of exhibiting relevant differences, attention may be called to the place of pragmatism in the two philosophies. Peirce to be sure speaks of his proof of pragmatism as "the one contribution of value that he has to make to philosophy" (V.415). And yet it is clear that the importance of pragmatism for Peirce lay primarily in its metaphysical implications and only secondarily in its contribution to the method of determining the meaning of any concept. He thought that the establishment of pragmatism carried with it the establishment of critical common-sensism, the reality of laws, and the doctrine of continuity—and these were the philosophical treasures which Peirce sought. For when the pragmatic maxim seemed to conflict with these and other prized results he drew back: thus in spite of his analysis which would make the meaning of any concept ultimately identical with a habit (V.494), he continually raised doubts "whether belief is a mere nullity so far as it does not influence conduct" (V.32); he feared

certain applications of the doctrine to mathematical concepts (V.3); and he even came to add a fourth stage of the clearness of ideas over and above the third or pragmatic stage: the meaning of a concept is then found in the contributions of the reaction it produces to "concrete Reasonableness" (V.3). Such tendencies are absent in Mead's account; in his writings the instrumentalist position is never compromised, and meaning remains embedded to the end in its empirical and behavioristic context. Pragmatism is peripheral in Peirce, but focal in Mead; to the one it is a step in the establishment of certain metaphysical and religious beliefs, while to the other it becomes the persistent center for detailed analysis of philosophic and scientific concepts.

Thus we see that while Peirce and Mead have much in common, Mead in every case gives a more restricted validity to doctrines accepted by both, and the restriction always tends toward a more empirical, pluralistic, behavioristic, and naturalistic formulation. We must now attempt to see the sources of this difference, and then note their effect in determining the cosmological formulations of the two men.

III

It is my suggestion that the source of the differences should be most evident in the analyses of signs which Peirce and Mead gave, for both men very early singled out the field of semiotic as of central importance, and in a life-time of devotion to this ancient philosophical discipline made contributions second to none in the modern period.

First we must note in a summary fashion the striking convergence of the two analyses. In both cases the sign is held to function within a triadic situation. The members of this triad are called by Peirce the Representamen, Interpretant, and Object. Something becomes a representamen by functioning as a substitute for some object in virtue of being interpreted as indicating that object. Two further qualifications are needed, and these must be discussed separately. The first qualification is that for Peirce not all representamens are signs: a representamen becomes a sign if the interpretant is a cognition of a mind (II.242). Thus the concept of representamen is not restricted to situations

involving minds or even living beings. Nevertheless, it is characteristic of Peirce to maintain that even in such situations something akin to mind is involved, and he occasionally speaks in this connection of a "quasi-mind". He not merely holds that "meaning is obviously a triadic relation", but also that "every genuine triadic relation involves thought or meaning" (I.345). Since Thirdness is taken to be a categorical character of reality, the fact that Peirce makes the sign situation a special case of triadic relations and ascribes thought or meaning to all such relations constitutes one of the essential sources for his idealism, and the ground for the view that the universe is a vast representamen working out God's purposes. It is this aspect of Peirce's thought that Royce could so easily turn to the service of absolute idealism.

At this point we find one source of Mead's divergence. Mead does not ground his analysis of signs on a general theory of triadic relations, but there is no incompatibility between his position and such a formulation. He too holds that signs involve a triadic relation, and distinguishes non-significant from significant symbols, the latter corresponding to Peirce's genuine sign. Using a terminology developed by Brewster³ to make more explicit what is involved in Mead's analysis we may say that Mead's non-significant symbol includes two sorts of signs: physical signs and gesture signs. A physical sign is any property of an object interpreted by a reacting organism as an indication of further properties of the object which are to be encountered in a later stage of the act: thus the bone as seen is a physical sign to the dog of the bone to be snatched and chewed. A gesture sign is an early phase of the act of one living form which is interpreted by another living form as an indication of the later stage of the act of the first form: thus the clenched fist of *A* may serve as a sign to *B* of *A*'s coming blow. As contrasted with both physical signs and gesture signs, the significant symbol (or language sign) is a sign common to a number of living beings, so that what it designates to one is designated to all alike. We shall not consider in detail Mead's analysis of the origin and nature of such signs, but merely state that in his opinion it is through the spoken word connected with

³ John M. Brewster, "A Behavioristic Account of the Logical Function of Universals", *Journal of Philosophy*, vol. 33, 1936.

common reactions in a number of organisms engaged in coöperative activity that the gesture-sign situation becomes transformed into a situation involving genuine language signs or significant symbols. It is essential to note, however, that the transformation from one level of sign to another is not explained by introducing the term 'mind' for higher levels in contrast to 'quasi-mind' for lower ones. Rather the different situations are taken to characterize the concept of mind: to have a mind and to take cognizance of objects by the mediation of significant symbols are in Mead's terminology one and the same thing. Signs do not therefore presuppose a previously existent mind; mind is rather a characteristic of behavior involving a unique kind of sign—the language sign. The result is that by the genetic differentiation of levels of signs, Mead is able to isolate features distinctive of these levels, and the recognition of common features offers no temptation to read down into the lower levels features distinctive of the upper levels. Mind is not extended throughout nature and no idealistic conclusions are drawn. It may perhaps be said that this difference is only terminological, since 'mind' can be defined as distinctive of certain levels of signs or as a common factor involved in all sign situations. Nevertheless, however the term is used, the actual differences of various levels of triadic situations must not be neglected, and the danger of a wide use of the term 'mind' lies precisely in the emotional temptation surreptitiously to extend the distinctive characteristics of higher levels to the lower, stressing continuities and disregarding the equally basic discontinuities. The avoidance of this temptation may be taken as one advantage of Mead's genetic approach over the purely logical analysis of Peirce, for the latter approach in isolation contains no check against a too-wide extension of its results.

This line of argument may become clearer if we introduce the second qualification to Peirce's view that a sign involves a representamen functioning as a substitute for some object in virtue of its being interpreted as indicating that object. For Peirce it is characteristic of a genuine sign that the interpretant of a representamen in turn becomes a representamen indicating for a successive interpretant the same object indicated by the first representamen (I.541, II.242, V.138). Peirce is impressed by this situation

because it seems to make evident the doctrine of continuity in the realm of mind and meaning, and to support the contention of idealism that the world process is a continuous expansion and interpretation of meaning. Mead admits the fact in regard to language signs,⁴ but once again his explanation involves no such metaphysics. The fact is explained in terms of the social character of the significant symbol. Since at the level of mind (the level of the functioning of significant symbols) the thinking individual has internalized the social process of communication, he tends to reply to his own symbols as another would reply. He thus progressively interprets the meaning of his symbols in terms of further symbols, and so amplifies and extends his response to the object indicated by the symbols at the initiation of the process. Mead thus gives the background which makes intelligible such statements of Peirce as the following: "I call this putting of oneself in another's place *retroconsciousness*" (I.586); "the inner world, apparently derived from the outer . . ." (V.493); "all thinking is dialogic in form. Your self of one instant appeals to your deeper self for his assent" (VI.338); "we become aware of ourself in becoming aware of the not-self" (I.324). Dozens of statements of this sort might be quoted, and could have been written by Mead as well as by Peirce; they indicate the remarkable degree of convergence of the two analyses of signs and their relation to thought. The point important for our purpose is that these statements of Peirce attain a consistent explanation when interpreted in terms of Mead's social behavioristic approach, but when so interpreted the recognition of the distinctive preconditions for the appearance of mind and significant symbols removes the warrant for regarding nature as a great mind interpreting itself by the ever-unfolding chain of signs. If it be said that such an extension is justified by the principle of continuity, it must be answered that Peirce himself occasionally admits that this is a methodological rather than a metaphysical principle, and certainly the triumphs of the atomic theory and quantum mechanics in our own day indicate that the principle of discontinuity is methodologically of equal importance to its much overworked complementary principle.

⁴ *Mind, Self, and Society*, 181 (University of Chicago Press, 1934).

So much by way of substantiating the hypothesis that the significant differences between Mead and Peirce center in their interpretation of the phenomena of signs. We have seen how Mead's social behavioristic approach permits of a theory of signs which concurs with Peirce's results obtained by logical analysis, and yet furnishes a principle of limitation which does not require that these results be interpreted in the idealistic manner. We now wish to explore in more detail the resulting cosmological differences, concentrating our attention especially upon the treatment of possibility, existence, and generality, and upon the relation of mind to nature.

IV

We have been contrasting the metaphysical aspect of Peirce's thought with Mead's more constant scientific temper. In one sense this is unfair. It is possible to pick from Peirce's writings many passages in which he insists that philosophy is to be scientific, never passing beyond probable statements based on empirical evidence; that metaphysics is to be grounded on formal logic and this in turn upon semiotic; that metaphysical principles are simply logical principles accepted "by a figure of speech" as "truths of being"; that metaphysics consists primarily in "thoughts about words, or thoughts about thought" (V.244, 343). And such passages would make possible an interpretation of Peirce as primarily a logician, reducing metaphysics to a somewhat literary and metaphorical extension of logical results. This is clearly not a false interpretation, but it can hardly be regarded as the full story. Peirce certainly permits himself many statements that from this point of view would have to be regarded as sentences which are really about signs but are wrongly interpreted as being about non-symbolic objects. Peirce however could hardly accept this correction, for it is clear that he is congenial to the typical rationalistic belief in an isomorphism between signs and things that are not signs; he expressly holds that thought is "the mirror of being" (I.487). The issues here are complex and not to be resolved by a word. Nevertheless, one can admit that there are some propositions true both about signs, and things that are not signs, without holding that the isomorphism is complete: not merely is a reference to

the conventional factors in language relevant, but the introduction of special signs in a language to indicate the relation between signs in the language makes it impossible to find ontological significance for all signs. It follows that one must exercise great caution in reading out logical principles metaphysically. Peirce's Scotist affiliations occasionally cause him to transgress such caution.

However, it is not the general issue that occupies our attention at this point, but rather the special form of the problem presented by the Peircean categories. Firstness, Secondness, Thirdness, isolated by attention to iconic, indexical, and symbolic types of signs, are given metaphysical validity as the generalized expression of the "realms" or "universes" of possibility, existence, and mind. We have already remarked that Peirce tends often to talk metaphorically about these realms, as if mind works on possibility to direct existence into the form of embodied lawfulness. Now in terms of the general thesis that the difference between Peirce and Mead is rather upon the extension of certain doctrines than in the doctrines themselves, our problem is not to deny the Peircean doctrine of "realms" and their interactions, but to see how in Mead's formulation the somewhat hypostatized and metaphorical description drops away. This requires that we comprehend Mead's concept of the act and the objective relativistic cosmology which results from its application.⁵

Keeping for the moment to the level of biological existences, we may say roughly that for Mead an act is a process of adjustment of a living form to an environing world, the process moving from an initial want or interest through stages of perception and manipulation of objects to the satisfaction of the want or interest by a suitable object. The act may be relatively simple, as in the case of satisfying hunger, or very complex, as in the social act by which a nation realizes such a complex end as victory in war. The act is an instance of "natural teleology" in that its statement involves reference to the goal to which the early stages of the act tend; it does not however necessarily involve "psychical states" nor consciousness of the goal or deliberation concerning the steps to be taken in reaching the goal. Now the important point is

⁵ See Mead's *The Philosophy of the Act* (University of Chicago Press, 1938).

that the complex behavior-object circuit can be considered from the point of view of behavior, or with reference to the object, and a significant parallelism of statements results. In terms of the agent the process may be analyzed into the stages of perception, manipulation, and consummation; in terms of the object the object may be said to manifest in this process corresponding distance, manipulatory, and value properties. This is the clue to the most significant feature of Mead's objective relativistic cosmology, for it involves the view that secondary, primary, and tertiary qualities are genuine properties of the object relative to the appropriate stage of the act. The food object is odorous at the perceptual stage of the act, it is a physical object as revealed at the manipulatory stage, and it is a value object relative to the consummatory goal of the act. Thus objects in nature have qualitative, quantitative, and value characters relative to certain situations, and these situations must be stated if the sentences which ascribe these characters are to be complete. Mead's thought is in harmony with the growing recognition that objects have properties only in virtue of existing within one or more systemic contexts; his position is a generalized objective relativism in that nature is regarded as the organization of such contexts (situations, systems, perspectives, presents).

Mind appears within the act when the later stages of the act are controlled by the intervention of significant symbols which indicate these stages and the corresponding properties of objects. With the appearance of mind, itself a phenomenon in nature, the agent is able to transform the end or goal of the act into an end-in-view and to take account of the conditions set by the object which must be met if the act is to pass to its culmination. "Final causes" in this way gain reality, but not in a wholesale and speculative fashion: the term either refers to the objective purposiveness of the act, or, preferably, to the fact that a symbolically indicated future is made available for the control of the ongoing act. The tendency to hypostatize mind loses its excuse for being and the metaphysical statements often made in terms of 'control by the future' or 'the interaction of the realm of final causation with the realm of existence' are replaced by their empirical equivalents.

The same transformation occurs with respect to the concept of mechanism. The world which physical science presents is primarily

the world as it reveals itself at the level of manipulation. This physical world assumes great importance since the passage from the stage of perception to the stage of consummation of all or most acts involves passing through the stage of manipulation. Hence in isolating the most constant physical features of objects, physical science gives the conditions necessary for the completion of all or most acts. This central importance of the world presented by science does not however render any less real the status of distance and consummatory qualities in nature, nor permit of an all-embracing generalization of the concept of the mechanical. For the mechanical, conceived as the conditions of the completion of the act, coincides with the predictable, and the completion of the act is not predictable in terms of the conditions it must meet. Science presents at the best the conditions necessary for the successful termination of the act, but not the sufficient conditions. What possible characters of objects will be realized depends on how the agent will react to and use those objects, and this depends in turn upon the purposes of the agent. Even when the biological sciences present accounts of the act, of how symbols operate, and of what purposes agents normally have under certain conditions, these accounts are still theoretical constructions within still more complex acts whose termination will utilize those accounts without being uniquely determined by them. A completely generalized mechanical account, if meant as more than a methodological precept, reveals itself as another instance of the metaphysical passage to the existence of a limit of a serial process. I think it is a fair interpretation of Mead's results to say that they render the generalized opposition of the mechanical and the teleological a false formulation and the problem of their reconciliation a pseudo-problem. For on the one hand there is no limit to the attempt of science to isolate what is predictable, and yet on the other hand the results of science, however much they may interact upon purposes actually held, never uniquely determine the terminations of the wider acts within which scientific theories function.

The implications of Mead's approach for the status of possibility, law, and mind in nature are clear and need no extended discussion. Possibilities are objective in that the properties which objects manifest depend on the interaction of these objects with

other objects within determinate systems. There is no temptation to erect possibilities into "eternal objects" in the sense of Peirce and Whitehead. Possibilities are objective, but not as entities; statements of possibility are statements of the behavior of objects within various systemic contexts. It is evident that this account does not minimize Secondness or existence. That there are physical things with characteristic modes of interaction under stipulated conditions is simply a fact, and the laws of science are statements of these modes of behavior in a form suitable for prediction. As for Thirdness, Mead admits its objective character through his insistence upon the occurrence of acts in nature, and in his recognition that the eventuation of these acts may be directed by the symbolic indication of a hypothetical future. In all three cases Mead is able to take account of what is vaguely and ambiguously referred to under the term 'universality'. Many objects persist through many contexts and exhibit common properties in these contexts; the same laws are applicable to many situations and entities; some signs have a common meaning to a number of persons. Signs are universal (or general) to the degree that they apply to diverse entities and occasions; entities and occasions are universal (or general) to the degree that they may be designated by the same signs. But in neither case do universals constitute a class of entities in addition to the domain of natural processes and acts of symbolization. Mead's account implements more thoroughly than Peirce had done the latter's thesis that the being of universals "consists in the truth of an ordinary predication".

Hence in Mead's cosmology all of Peirce's characteristic emphases are satisfied, but with the important difference that possibility, existence, and mind do not fall apart into realms: they remain as distinguishable but mutually implicative aspects of nature, and their predication in propositional form is valid only under definite and specific conditions. In this way, unless I am mistaken, the ambiguities and difficulties which many readers have found in the Peircean categories are resolved. Just as Mead's social behaviorism avoids the idealistic consequences inherent in Peirce's theory of signs, so does Mead's objective relativism provide the basis for the integration of Peirce's three Realms of Being.

One remark may be added at this point, though it cannot be

given the importance it warrants. In our account of Mead's cosmology we limited ourselves to the biological aspect of the concept of the act. It must now be pointed out that the concept of act is only a form of a wider category of process, just as the biological concept of the social is only a particular form of a wider concept of the social. In places Mead used the Whiteheadian term 'organism' for what we called process or act, and then distinguished inanimate and animate organisms.⁶ Regardless of the suitability of the terms, the intent is clear: Mead wishes to assert the reality of processes or "acts" at all levels of nature. To this extent natural teleology, Thirdness, chance, and novelty are extended throughout nature. Nature then consists of interrelated social systems or perspectives—nature is social both in the sense that its basic constituents are systems in which the nature of the members is determined by the relationship to other members of the system, and in the sense that these systems are integrated by members which are social in virtue of their inclusion in a number of systems. There is, however, on Mead's analysis no possibility of one all-embracing system of the type found in the absolutistic philosophies. There are sub-biological, biological, and mental levels of nature, and the later levels are interpreted as emergents from the other levels and integrated with them by emergent entities common to all. The terms 'process (or 'act')', 'social', 'emergent', and 'possibility' apply at all levels and in the interconnection of levels, but recognition of continuity is accompanied by an equal recognition of discontinuity, so that Mead, unlike Peirce, Whitehead, and certain contemporary philosophers of science, does not apply throughout nature the concepts of thought, feeling, mind, self, end-in-view, final cause, deliberative self-control—for the good reason that the conditions necessary for the appearance of the phenomena in question are not found throughout nature. Once again we see how Mead's analysis, while agreeing with certain general theses of Peirce, interprets these theses in a more empirical and restricted manner, so that in place of a metaphysical idealism there results a thorough-going naturalistic cosmology.

⁶ *Philosophy of the Present*, 175 (Open Court Publishing Co., 1932).

V

If our account has been reasonably accurate it should allow us to discern both the historical continuity of the pragmatic movement and the possible direction of its future development. We have noticed on the one hand the tendency to submit certain general and metaphorical expressions to a more critical analysis—and in this sense pragmatism has become increasingly less metaphysical and increasingly more empirical and naturalistic; on the other hand, provided we bring Dewey's work within the range of our attention, we noticed a tendency for pragmatism to round itself out by giving its version of all the traditional philosophic interests (logic, ethics, esthetics, social philosophy, cosmology)—and in this sense pragmatism moves in the direction of systematization. More careful analysis and wider attention to fields subject to such analysis: this is the twofold direction which pragmatism has gained from its past and the probable twofold direction of its future.

While pragmatism has been becoming at once more critical and more ambitious, a new flower has come to bloom in the philosophical garden—logical empiricism. Its roots are as deep historically, and its growths have already assumed a sturdy size. Are these flowers of the same or different stock? Can they grow in a common soil? Schiller seems to think not; he apparently finds in the logical empiricist's striving for careful logical analysis the seeds of a new dogmatic absolutism.⁷ Schiller's protest at least makes us aware of the persistence of the Jamesean tradition within pragmatism, but since he makes the same criticism of Peirce it is possible that his interpretation is as wrong in the one case as in the other. It is no doubt true that the biological orientation of most pragmatists after Peirce is unmistakably different from the analytic orientation of the logical empiricists. Nevertheless it seems possible to regard the two traditions as complementary and convergent components within a wider and more inclusive movement which I have called scientific empiricism.⁸ It must not be

⁷ See his discussion with the author in the *Personalist*, Vol. 17, 1936, pp. 56-63; 294-306.

⁸ C. W. Morris, *Logical Positivism, Pragmatism, and Scientific Empiricism* (Hermann et Cie, Paris, 1937).

forgotten that Peirce's version of pragmatism in no sense weakened his interest in logical analysis or in a theory of meaning stated in terms of the criterion of verifiability. There is evidence in C. I. Lewis and others of the possibility of regaining this wide orientation of Peirce without sacrificing the contributions of James, Dewey, and Mead. From this point of view the logical empiricist's refinement of the techniques of logical analysis and of the empirical criteria of the meaningful are further steps in the direction which Peirce indicated. Thus Peirce's distinction of logical and material leading principles comes to sharper formulation in Carnap's treatment of logical and physical rules; Peirce's stress on the "strata of signs" is developed in the concept of meta-language and in the theory of types; Peirce's stress on the importance of probability inferences is amplified in Reichenbach's theory of probability and induction. In incorporating into itself the attitude of Peirce, contemporary pragmatism is thus moving into the circle of interests which characterize the logical empiricists.

It is also true that the logical empiricists have in their own way been moving with remarkable rapidity in the direction of typical pragmatic emphases. Hahn and Carnap have stressed the instrumental significance of formal structures within the total scientific enterprise; the earlier tendency to regard judgments of perception as indubitable has given way to the recognition that the verification of all propositions is in varying degrees only partial; the empirical theory of meaning has been widened by Carnap⁹ and Reichenbach in a way which obviates the main criticisms often raised by pragmatists against positivism; Reichenbach¹⁰ has recently written that "there is as much meaning in a proposition as can be utilized for action", and has himself seen the connection of his views with pragmatism; the earlier somewhat Machian sensationalism has been replaced by a behavioristically oriented psychology; the term logical empiricism is now generally preferred to the term logical positivism, and an empirical realism is explicitly defended by Reichenbach, Feigl, and Schlick; the tendency to neglect the category of the social has attained partial

⁹ R. Carnap, "Meaning and Testability," *Philosophy of Science*, 1936, 1937.

¹⁰ H. Reichenbach, *Experience and Prediction*, 80 (University of Chicago Press, 1938).

correction in Neurath's conception of social behaviorism; the growing stress upon the concept of convention, the relativity of logical propositions to a specific language, and the dependence of formal linguistic structures upon rules of operation would all seem inevitably to lead to a more conscious consideration of the pragmatic aspect of thought and language.

In the light of such convergences—and many more might be mentioned on both sides—it does not seem unreasonable to think of pragmatism and logical empiricism as different emphases within a common movement. Peirce was at once formal logician, empiricist, and pragmatist, and all of these points of view are integrated in scientific empiricism just as they are all incorporated in the scientific enterprise itself. In working within this wider perspective, pragmatism will remain faithful to its founder and will avoid a one-sided emphasis upon the biological which has at times hindered the recognition, and led to the distortion, of some of its most central insights. It is true that the logical empiricists have done little with judgments of value or with assessing the cultural implications of science or with the systematization of a cosmology. Here the work of Dewey and Mead may offer stimulation towards a more exact and systematic formulation of their insights which the newer techniques of analysis make possible. That the unity of science movement, with the *International Encyclopaedia of Unified Science*¹¹ as one of its organs, will in its development enlarge its considerations to include such matters seems certain. Within the framework of the larger movement—whether called scientific empiricism or by some other name—there is manifest the striving for a coöperative intellectual synthesis which would bear to our day the relation which the thought of Aristotle and Leibniz bore to theirs. Within this modern form of the Great Tradition the impulses which have carried the pragmatic movement to its present culmination will be preserved and amplified.

CHARLES W. MORRIS

UNIVERSITY OF CHICAGO

¹¹ To be published by the University of Chicago Press, beginning March, 1938.

KNOWLEDGE AS APTNESS OF THE BODY¹

THERE are two assumptions without which this paper might seem irrelevant. The first is that, instead of being a search for the Good or for God, philosophy is a kind of knowledge. The second follows, *viz.*, that the primary and specific interest of the members of a philosophical association is the acquiring, the increase, and the dissemination of this knowledge. But these two assumptions seem warranted; for only on the basis of their acceptance, not only among philosophers, but in general, is there any place for us in educational institutions or any propriety in our claim to the Greek term under which our pedagogical offerings are listed in university catalogues and our writings in those of publishers. That philosophy as studied and hence as taught and as written be some sort of knowledge is the condition without which our activities and our salaries are waste in a world pressed for the bare necessities of animal life almost as harshly as for a minimum of spiritual nourishment. In fact, of course, these two needs are not separated in any such crass opposition as the terms *animal* and *spiritual* suggest; since in what we boast of, though perhaps provincially, as the most spiritual of religions, charity even of the materialistic sort, the charity of loaves and fishes, is one of the primary virtues, one of the hall-marks of spirit.

What sort of knowledge philosophy may be it would be impertinent for me to suggest to professional men in the field. For the purposes of this paper that is a matter of indifference. If our field is knowledge of any sort whatever, that is enough; for I shall be trying here to exhibit the meaning of the word *to know*. Not, however, merely as this word might be more or less arbitrarily defined, but as it is regularly used and applied to what is the result of learning. For it would seem clear that it is only as knowing follows upon learning that knowledge can conceivably be taught, and it is as teachers, whether of college students or of some other larger audience, that we have any even putative function and can so much as imagine ourselves integral to our civilization and not merely symptomatic somewhere in the region of its pathology.

¹ The presidential address to the Pacific division of the American Philosophical Association at Scripps College, December 29, 1937.

I should like then to speak of knowledge as an aptness achieved by learning, a readiness to respond in particular ways to particular situations, and so clearly as a state of the body. And I should like to do this not only because what I say seems to me so, but also because it seems to me of the first importance that we philosophers should see that it is so. Our blindness on this point seems to me to have been culpable. It is philosophers who have furnished what are nowadays called ideologies or rationalizations, who in short have propagandized for cultivating, respecting, and even admiring the groundless prejudices about a higher sort of learning and about an entity called mind or spirit, for which, so far as it is distinguished from the body, there is no shred of evidence. It is philosophers too who have thought fit to despise what they call the limitations of science. And they have done this often on the basis of an *a priori* dialectic which, as any beginner in logic realizes, can not possibly offer any one any knowledge of anything—except just that expertness in dialectic which is itself an aptness of the tongue or of the nervous system or perhaps of the writing arm.

If the clerks have been traitors to the spiritual life it is not because a few of them have tried to do their share towards informing themselves and others of the actualities of the world they live in, but that so many of them, in difficult days, have been willing to revert to ancient shibboleths like the 'life of the spirit' or the 'primacy of the spiritual' instead of cultivating verifiable knowledge. They have refused to look at the actual evidence or even to cultivate the *methods* of knowledge. They have arrogantly and ignorantly set up ethical norms and theories without so much as an acquaintance with law, with the most casual and superficial knowledge of social history and social institutions, and with no expert knowledge at all of human organisms. Instead of trying to understand and share in the lives of other men, they continue to retreat from the world of experience into more and more remote regions, into the confusions and inconsistencies if not of Christian mythology and scholastic theology, then of Aristotelian causes and essences or hierarchies of Platonic Forms. It is as if all these had not been worked out and built upon, criticised and sanely enough put into their appropriate and respected places long ago. They were at best suggestive early efforts in the direction of the very knowl-

edge that has gradually grown out of them in the achievements of later ages. If it is only sanity or decent piety to cultivate the roots of the still growing tree of knowledge, surely it is no less than a form of insane idolatry to attempt to give up modern science and adopt as actual knowledge these earlier achievements themselves. It is insisting that the fruits of the tree that we cultivate are poison, so that we should destroy it. But not root and branch; for we are apparently to save the roots to chew upon in a fine austerity of spiritual fervor. Both for ourselves, and (if we are not checked by the common sense of other men and dropped out of the way as antisocial lunatics) also for human knowledge in general, the consequences that would ensue are plain enough. Clericalism has always been the foe of clarity in thinking as authority has always been the foe of vitality in it. It is the very function of philosophers to doubt authority and to continue the secularizing of knowledge. But this is hopeless unless we are willing to see what knowledge is and to recognize the fact that it is not the attribute of some mysterious and quite indefinable entity called the mind, which is said to possess it and the body as well.

Certainly all that we are said to know by way of the mind is the perceptions of the body, whether body is here subjective or objective genitive. Spinoza labored this point nearly three hundred years ago and went unheard. When he suffered revival a century later, it was at the hands of romantics who missed his point completely. In the meantime Berkeley had assumed a mind without feeling the need of evidence for its existence and apparently without even the consciousness that he had made so bald an assumption. And all of his evidence for a *greater* mind or spirit, the compulsion, the coherence, and the permanence that we attribute to what we experience, are just these empirically found characteristics of it. They are as irrelevant to demonstrating the existence of a god as Descartes's fantastic proofs. And they are more than adequately refuted by Spinoza's passage about the dog-star—in his note to the seventeenth proposition of Part I of the *Ethics*—or by Hobbes's set of objections to the *Meditations*, which Descartes hardly took seriously. Even William James's famous question about the existence of consciousness failed to lead philosophers generally to the natural conclusion that has lately been reached by some of the

psychologists. If this conclusion is not that there is no such thing as mind, it does at least amount to saying that if philosophy is knowledge based on evidence, then philosophers can have no knowledge of any such entity as mind, and no excuse for discussing its nature.

But I am not here reviewing the long campaign which is already reaching its conclusion under the guidance of my betters. This series of battles was begun before the World War and almost lost again in its confusions and in the post-war waves of pseudo-religious retreat from its horrors and from the equally horrible consequences of the so-called peace, which are so too much with us still. My concern is only to expound a view of knowing, which, familiar as are its main outlines in the writing of pragmatists and behaviorists, is still felt by many, perhaps most, philosophers to be inadequate to meet even the most elementary requirements for what are called philosophical theories of mind, of knowledge, and of truth.

That the view still needs expounding is clear without more evidence than is given in the abstracts of the papers being read at Princeton and New York this week. Mr. Sheldon can still speak of acts of the mind which are not acts of the body. Mr. Bogoslovsky can seriously assert that freedom of the will is a problem that puzzles the modern mind. Only two years ago at Baltimore Mr. Pratt's address was a long review of the "mind-body problem", which under the title *Philosophical Anthropology* is also being considered at present by Mr. Lovejoy in a course at Harvard. Mr. Brightman's address last year in Cambridge concerned itself seriously with empirical evidences of the existence of a non-empirical being called God, the connecting link in the argument being an assumed mind with more than natural status. It would seem plain that my account of knowing as the aptness of the body is not completely accepted among philosophers, and that it may require some more or less persuasive exposition, if it is to be seen as at all acceptable, much less as an adequate account of the matter.

Such knowing as is of primary concern to teachers, moreover, is the knowing that follows learning. Hence I am interested not so much in a solution, or rather a dissolution, of some of what I take to be the factitious problems of epistemology and metaphysics,

as in an account of knowing that relates the kinds of knowledge that we are all familiar with to learning in the two commonest senses of that word. One of these is the meaning of the word *learning* as it applies to what students do in relation to teachers, whether of arithmetic or of rowing, of Greek or of singing, or what rats do in psychology laboratories, or dogs when they are being house-broken. The other is the meaning of the term that we intend in speaking of men of great learning, men who are called scholars. What either learned men have been taught by themselves and others, or students or rats or dogs have been taught by various devices, such as mazes and schools, rods and gymnasia, laboratories and books—all this is called knowledge. But it is found and tested only in connection with the bodies of the creatures that have been taught. A man's knowledge he carries with him, and he gives evidence of it only in his various specific responses to various situations at various times and places. So far as I can see, a man's knowledge is nothing but this readiness to respond in specific ways.

Response is, however, response to something or other, so that to call knowing aptness for specific responses is to make the test of the knowing the adequacy of the response to the situation. And situations occur *prima facie* as what we call data. If I know how to drive an automobile, my body, put into a certain situation, responds by pushing on pedals, turning a steering wheel, moving a gear-shift handle. It will even be generally admitted, I suppose, that the knowing of certain sorts of skill is tested in this way; that what is being tested is the learning of the particular skill; and that the skill is said to have been learned and so to have become knowledge, when there has been established a certain coördinated pattern of nervous-muscular functioning which can be set off by the right signals.

What will not be so generally admitted is that all knowledge is best described as such bodily aptitude in the face of the discriminated data that define a situation in which behavior goes on. In fact it will be objected that such bodily expertness, such readiness to respond in specific modes, is as far as possible from what we usually call the better, or the higher, or the more characteristically human, or the strictly rational, part of men's knowledge. For the ideal in these cases of technical skill is smooth, successful

action, appropriate and fully adequate to the situation, and at its best when we have to pay only the barest modicum of attention to it. What I wish to call knowledge thus comes close to the unconscious. It is the kind of knowledge that our digestive organs have, the kind of knowledge that sometimes carries with it a sense of well-being, at the most a thrill of vitality and successful achievement like that of the expert diver or ski-jumper or opera singer, at the least the bare feeling of not being ill at ease, as in knowing how to use the comfortably familiar implements at the dinner table.

That such feelings are of the body, the way our body itself feels, or, if you like, what is felt by the body in the given situation, seems obvious. But that this feeling is not the knowing is equally obvious. For we retain our knowledge of diving when we are far from any water to dive into. The feeling of success or exhilaration marks the act or the imagined act, and is present with it; the knowledge is ours and is recognized by others as ours even when we are asleep. One does not lose one's knowledge of how to whistle or how to talk or write by going to bed at night. When students reach the point of being afraid to sleep for fear of losing the knowledge that they will need next day in an examination, it is a sign that they have *not* learned their subject, not acquired the knowledge in question. Knowledge of how to ride a bicycle may lie unused and even forgotten in our bodies for a quarter of a century without being lost. Our skill in pronouncing the syllables of a language that we learned in childhood and have not used since, may be revealed in the distinctive character of our pronunciation forty years later. In learning the proper responses, the body has acquired a specific aptness which it does not altogether lose so long as it remains alive and healthy, its joints and muscles flexible, and its nervous control unimpaired.

As Russell once said, it is embarrassing to find how far strict behaviorism does go to give us an adequate account of what we call our minds. But any theory of knowledge, as Russell was also at pains to tell us, must offer a criterion of truth and falsity. And since response is neither true nor false, but only marked by varying degrees of adequacy to situations, the criterion of aptness of the body apparently could not constitute the criterion of the truth of our statements embodying knowledge.

But this is a fairly trivial objection, involving two confusions that are not difficult to remove. One of these is the assumption that statements constitute the knowledge that they are said to express. To assume this, however, is to deny the definition of knowledge here offered, to beg the question altogether. In the first place, statements are common and public property, whereas knowledge is always the possession of individuals. But, more significantly, the knowledge that statements give evidence of is only the knowledge of how to pronounce or to write those statements. It is verbal or linguistic knowledge, it might best be called laryngeal, perhaps. It is at any rate the aptness of the mechanisms of speech, written or oral. And it may have no slightest reference even to the ability to communicate in the language in question; as I have heard Arabs flawlessly pronounce English sentences of the import of which they had not the remotest notion, or little children recite verses in foreign languages, or ancient prayers in their own, without any inkling of what they were saying. It is partly because we have neglected this plain fact that so many glib college students, young Englishmen from Oxford as well as American girls from Radcliffe, come out of college with brilliant records and no education except in reading, writing, and repeating. Statements whether in one language or another, English or the symbolisms of mathematics, are never a final test of any knowledge but that that is the competence in the particular language. Language is at best only secondary evidence of the knowledge of anything but just itself, namely language. It is never actual knowledge of what it purports to assert; nor is it necessarily evidence of such knowledge. In fact, it is only too often evidence of the lack of it; as when, for example, our foreign correspondents so elaborately and so expertly tell us of approaching events, the flat impossibility of which is plain to any informed person on the ground, who has his eyes even half open, whose knowledge of what goes on about him is his actual response to actual situations. These he can then record for others, provided that he also has the knowledge which is aptness in language responses, responses of a quite different sort, however.

The other confusion that seems at first to preclude the possibility that a criterion of adequacy of response may be the criterion of the truth of statements, is the supposition that every statement of

a given form in a given language is necessarily either true or false but not both. Now statements of a form appropriate to the communicating of information may indeed be necessarily either true or false but not both, but only in case we have already set up a standard of adequacy for the response that is the test of the body's aptitude. Take so simple a statement as that A knows how to sail a boat. This statement will be true for some men, false for others, depending on what their respective standards of sailing are. According to one Shetland Islander I know, no Englishman is a sailor. If A is an Englishman, it is always false that A can sail a boat. The Raleighs and the Drakes make no difference; for the knowledge of how to sail a boat is peculiar to Shetland Islanders, and any sailing of a boat that is not a Shetland Islander's sailing of a boat is not sailing, and the man who does it is not a sailor.

But we need not go so far afield. Any examination in college asks in effect whether students have learned and now know a certain subject matter. We do not say that they either do or do not know the subject. We often say that they know it to a certain degree, well, or fairly, or very slightly, or ill. We grade their knowledge. Knowledge is then a matter of degree, not an open and shut case for a yes or no answer. Even when we use true-false examination questions, all that we ask for is a proportion of right answers. And who has not shuddered at helpless witnesses in the hands of clever lawyers or of investigating committees, whose questions, if answered yes or no, mean guilt where there is only innocence or innocence where guilt is blackest? Unless there is an unambiguous criterion of adequacy of response, the statement that a man has a passable knowledge of a subject, like the statement that a certain man is a sailor, remains indeterminate. Having no point of reference in a specific degree of adequacy below which convention will agree not to employ the term sailing for the response to the situation in a boat on the water in the wind, the statement remains either true or false, as you like, and, if you like, both true and false.

Definitions, in fact, are often the drawing of a line to mark a degree of adequacy in functioning above which alone the term defined is to be applied. It is thus the conventions of language, especially of the language that is logic, that are required, if statements of certain forms are to be necessarily either true or false but

not both. And these conventions have followed the specific requirements for communication; they are not the foundations of the world or the nature of God's mind or even an epistemological *a priori*. They are, in fact, so far as I can see, only what has deceived us into asserting that there is such an *a priori*. Their empirical use is so ubiquitous that we give it metempirical status like that of some divine spirit or the Holy Ghost itself. Once the convention has been granted, however, the knowledge is either to be admitted or to be denied; and in this case the statement purporting to express the knowledge can be said to be either true or false but not both.

The test of truth then is secondary and derivative, as language itself is secondary and derivative. What is primary is knowledge, which is tested—as also it is learned—in response to data. And knowledge is always a matter of degree of adequacy; though when a criterion is set up so that nothing will be called adequate unless it is of this given degree of adequacy, to be tested in a given response, then there will be yes and no answers. Whether or not a student knows a subject passably may be a very difficult question, with only a more or less plausible answer. Whether or not a student has marked eighty out of a hundred true-false questions correctly in the eyes of an examiner is easy to tell. And this is not at all to suggest that this is not the nearest that we can come to an intelligent judgment of the student's knowledge.

But even if all this were admitted, we should scarcely have touched what I suppose are thought of as the more serious objections to asserting that knowing is the aptness of the body and nothing else. For we have so far been considering cases of knowing how to perform certain operations and have shown that the test of *this* kind of knowledge lies in the performance. If so much as this is admitted, however, our case is well on its way to being established as at least a reasonable view. For if some knowledge is not an aptitude of the body, how does it happen that all knowledge is tested by the tests that can only apply to such aptitudes, tests that apply to technical skill, to ability to operate in particular ways? A test in performance would seem to be a test of the ability to perform; and if the test in performance is applicable to all cases of knowledge it would seem very strange if it were not ability to perform that was being tested. This amounts to saying that verifi-

cation of propositions that purport to express knowledge is always the carrying out of a set of operations, and that the demonstrated, that is the *exhibited*, ability to carry out the operations to the predicted conclusion, since it is evidenced by action, is the specific aptness of the body that has learned the operations.

What verification of a statement offers us, then, is evidence of learned ability or aptitude to operate in a specific way. But the verification of a statement is the evidence of its truth, and a true statement is the only kind of statement that expresses knowledge. That is to say, all statements expressing actual knowledge are true. But since all true statements are verified by operations, all knowledge is evidenced by operations. Operations, however, are evidence always and only of the aptitude to operate. Hence all cases of knowledge are cases of aptness of the body; for it is only bodies that operate.

Thus generally and abstractly stated the case will convince no one. And even in this general abstract statement we have had to claim that all verification of empirical statements takes place as operations of the body. We have also had to make use of the notion of a predicted conclusion of the operation of verification. The claim needs to be established; the notion of a predicted conclusion arrived at needs to be made clear. Perhaps, however, it will not be too difficult to supply these two needs.

It is plain enough, I suppose, that the truth of statements depends in part upon the adoption of linguistic conventions. It must be equally clear that tests of knowledge are also thus dependent upon conventions. At the level of ordinary unaided sense-perception, and at the level of conventional everyday speech, I know, for example, that there is a table in front of me. At this same level of speech and of perception the statement that there is a table in front of me is true. How do I demonstrate the truth of my statement? How do I demonstrate my knowledge? In the act of reaching out with my hand and touching the table. And both my knowledge and the truth of my statement are satisfactorily demonstrated for every one who will either believe that I feel the table with my hand when I say I do, or who can see my hand come into contact with the table. Your knowledge that there is a table in front of me consists in your ability, among numberless other more

distinguished aptitudes, to focus your eyes and to make an observation. But making an observation is an act, and the more apt your body is at a variety of acts of this sort, the greater is your actual knowledge. Since all empirical statements are predictions, and since predictions can be fulfilled only by acts, the sole evidence of knowledge is acts. But only bodies act. And since every specific sort of action is evidence of specific aptness, and of nothing else, what is evidenced when knowledge is evidenced is aptness of the body.

So much would seem at least to make sense of the claim that all verification of empirical statements is constituted of operations. And the case that I have used makes it clear that I am appealing to the widely accepted and familiar notion that the verification of empirical statements comes down in the end to perceptual verification, sense perception being, however, only one sort of verifying process or one step in a more complex verifying process. Even this will be called in question, no doubt; but I am willing to ignore the questioners here. For what I mean is, I think, clear, and it is so plainly a form of a very familiar doctrine that it would be gratuitous to dwell upon it further. There may still remain doubt as to its adequacy; but such doubt can not be removed by argument, but, if at all, by an attempt to exhibit the adequacy claimed. And this is what I have tried to do in the example. It may be worth reminding ourselves here, however, that the foundations of all modern philosophy rest upon just such operational verification. Descartes did not prove the existence of a lasting substantial self; if he demonstrated anything at all as indubitable it was what he perceived directly. He called it the fact of thinking; it had *better* be called the feeling of the body. For as Hobbes so clearly saw, the reasoning at best demonstrated the existence of body. My point is only that *whatever* was demonstrated, or rather made indubitable, was so established on the evidence of sense perception and by the operation which is the attending to just our own feeling of the body that we are.

But verifying operations, like any other operations carried out by us, can be evidence only of our bodily aptness in operation. Since they are admitted to be evidence of our knowledge, it must be plain that that knowledge is the bodily aptness.

At this point I can almost hear those inward groanings that you

keep inaudible. Is this not the most palpable begging of the question? What we find evidence of, you will say, is not the aptness of the body at all, but the nature of things, the state of the world about us. There is of course a table here, a solid, resisting physical object. Philosophers like other men have no difficulty over this. There is a table here for any one on any theory of knowledge. But again, I am only asking, a little clumsily perhaps, what that knowledge consists of. I am trying to say that if it consists of the aptness of the body, then there are no confusions or inconsistencies or even difficulties about the fact that we have this knowledge. I am under not the slightest illusion that the most sensible theory in the world could be demonstrated to be the only intelligible account of the facts, or even to be true. It would show a strange ignorance of logic to think that I have been demonstrating a conclusion. It just does happen to be the case that almost every theory of knowledge that epistemology has invented has insuperable difficulties in it, the worst ones—in all of the epistemologies that I am acquainted with—being the contradictions involved. But if we give up epistemology as anything over and above a hypothesis that shall make intelligible the psychological and physiological data, so far as we have these at hand in common sense and in science, then the hypothesis that knowing is specific aptnesses of the body will serve. It will give us only a rough conception to work with; but at least it will leave us free of the stultifying presence of transcendental entities impossible of definition, and of the sort of contradictory mazes of learned-sounding discourse that we are all so familiar with. It might also result some day in giving us that basis for evaluating our educational practices for the want of which we seem in universities at present to be either perfecting techniques without being able to bring them to bear upon our needs, or to be retiring further and further from human problems into the religious mysticism that on principle neglects all actual knowledge.

At any rate if we are to reason about knowledge as we do about other things, it seems to be necessary to admit that knowledge is inseparable from the body. When I leave this room I shall take my knowledge with me. I shall still know that I was at this table. My knowledge is simply never to be found where my body is not. My knowledge is as naturally and correctly said to be a property

of my body, nourished with food and water, air and light and warmth, as the capacity to run fifty or sixty or a hundred miles an hour along a highway is said to be the property of an automobile fed with gasoline and cooled with water and oiled and greased and in repair.

Much of my knowledge, of course, is as unconscious as I suppose that the automobile's activities are. If it were not, then driving an automobile for any length of time would be a fairly impossible task. Suppose that one had to think about the clutch and the brake, and the position of one's hands on the wheel, and the focussing of ones' eyes on the road, and of calculating the distance and the speed to pass another car safely. Once we have learned to drive, our body does all this for us. All that is required is that we stay more or less awake. What we know best we are not aware of even when we are acting upon our knowledge, exercising our bodily aptness. And this holds not only for driving cars but also for writing English or for teaching classes. It is almost proverbial that a good teacher does not know how he teaches; and no one who can write at all, knows how he writes. Yet all of us do know to some degree how to write and how to teach. And my example now is of the sort of knowledge that must be considered to lie at the furthest extreme from the mechanical manipulation of automobile gears. And I hope that it is perfectly clear that I am throughout discussing knowledge,—not awareness, not consciousness, whether of knowledge or of other things. All that I have been saying is, after all, familiar enough. Indeed, the claim that all empirical statements, all statements that pretend to be knowledge of anything, statements that are not the formal elaborations of logic or mathematics—the claim that all such statements, and hence all knowledge, can be tested only by operations carried out by the body is only a variation of the commonplace, or rather the tautology, that evidence is evidence, that evidence must be had to be evidence at all. But evidence of any specific knowledge, of the truth of any given statement, must be relevant evidence. And such evidence we find in bodily acting in and upon our world, and in no other way.

This brings us then to the other needed clarification, that of the meaning of 'a predicted conclusion'. Nothing ever concludes after all; nature just goes on. And for us the stopping of all motion and

the loss of all flexibility is death. How then do we mark the conclusion of a process of verification? Again, on any given level of actual discourse, there is no trouble. And we are always at some such level. Our knowledge is after all more or less fragmentary, just as our aims and our intentions are towards only more or less limited ends, which we sometimes actually achieve. When is a process of verification concluded? When is a prediction fulfilled? When is knowledge adequate to a situation? The questions are not far apart. Aptness in response, which is what we have been saying that knowledge is, includes the notion of that to which we respond. And what we respond to is what is given, what we find, what may be called the data of experience. It is these hard data that we must learn to respond to if we are to survive at all. And no doubt most of our most precious knowledge is learned in the womb, and most of the rest of it in infancy and early childhood. Survival for any length of time is the evidence that our knowledge is adequate to the situation in which we find ourselves in this life. As for more specific situations, the terms that define the situations and our purposes—on whatever level of generality or of convention—will serve to define the adequacy of knowledge to a situation, or the conclusion of a process of verification.

There is really no mystery about the situation if only we admit at once that words themselves, put into the configurations of language, are related to the actualities of experience only through our organisms. There is in general no correspondence between the structure of a sentence and the information that the sentence may be used to communicate. We may have a language in which the sound of a siren means that a fire engine is coming towards us down the road, or in which a high-pitched soft whistle means that we just saw a policeman round the corner, or that some one's appearance is particularly striking. And these are all cases of communicating information, of giving to others certain items of knowledge. The information is verified, if, say, when we look up, we see the striking appearance that was whistled to us. And so of the other cases. What any language or any symbolism does is to act as stimulus upon our senses. Then, if we are interested in more than the symbols themselves as given, if we go beyond the aesthetic content of the experience, and also beyond an interest in the systematic analy-

sis or development of the symbolism as such, we respond to the actual situation as would be expected by whoever gave us the information. We call the information correct and consider the statements verified by us, if when we so respond we come upon the data we expect to come upon.

Expectation is a fact, of course, and may in turn be analyzed; but since, like memory, expectation is assumed in all discourse, in all learning, in every intelligent act, we are under no particular obligation to do more here than note the point at which it is required to give clarity to the notion of a verifying process as brought to a conclusion.

If all that I have said seems pretty obvious, as it apparently does to healthy young minds untroubled by the difficulties of an earlier generation and unaware of the hesitation of philosophers to accept what begins to look like the simple common sense of pragmatism, still it has seemed to me worth saying. For pragmatic theories of truth and of knowledge are still held by many thinkers to be radically unsound and even to have been proved so. Such thinkers have too easily disposed of these doctrines, it seems to me, by noting that the pragmatic definition of truth defined what no one has ever meant by the word. This is Johnson's way of putting it in his *Logic*, and the criticism is not incorrect. But it is, as I hope I have shown, essentially trivial and almost irrelevant to the point of the pragmatists' expositions. It rests on the two confusions that I have been attempting to remove, confusions not always cleared up by pragmatists themselves. One of these is the notion that linguistic statements constitute knowledge; and this is clearly not so. The other is the doctrine that every statement of the appropriate logical form must be either true or false and cannot be both. This is not nonsense at all, of course; but it is only so in exactly the sense in which a response is successful or unsuccessful, adequate or inadequate. It is plain enough that only when we come to specific agreement as to a point above which all is success and adequacy, and below which all is failure and inadequacy, can we judge of the truth or falsity of any statement. For the truth or falsity of every statement is tested by whatever is used to test the adequacy of responses, and this in turn depends upon definiteness of prediction and the satisfaction of expectations.

What remains to be done in this paper is to make it clear that this account of knowing is appropriate to all that we call knowledge when we connect knowledge with learning and use the term to name that which educational institutions purport to further.

If aptness of the body describes the knowledge of a surgeon, of an engineer, of musicians and artists, and perhaps even of lawyers, we hardly need to be reminded, on the other hand, that what we ask of the 'higher learning' is never mere mechanical skill, not even the best professional skill. We do of course want men prepared to carry on the professions with all of the equipment in modern technique that is available. But the aim of higher education is not to produce mere skilled technicians; we want educated men. So much we can all agree to with Mr. Hutchins. What I question is whether the rest that we ask, the more than mechanical or technical knowledge that distinguishes men of higher learning, scholars of breadth and depth, statesmen of great wisdom and genuinely informed social purpose—whether this more is in any strict sense knowledge. I should also insist that so far as it is, and exactly in the sense in which it is, it has been included in the description that I have given of knowledge as aptness for bodily response. For it must be borne in mind that this phrase does not make complete sense unless it is seen to include a situation defined in terms of data. An enormous part of what is called knowledge is the enlargement and the systematization of this field, within which and to which all response is adapted. It is the field that some thinkers prefer to call meaning. But what it is called is not very important, so long as we see how it is cultivated, how it serves the purposes of learning and knowing, and how it is integral to intelligent response.

It is obvious, for example, that much of what we call broader and deeper and more scholarly knowledge is aptness of the body for responses that fit into larger situations, present to us as greater complexes of data than such as define situations totally comprised in the field of direct perception at the level of the unaided bodily senses. To know the streets of our native town so well that we are not even conscious of our perfect skill in getting from one place to another in it, is very limited provinciality, if we do not also know the geography that relates the town to others in our country, and our country to other countries dotted with other towns. But know-

ing Paris and London is not a different sort of aptness from knowing Claremont, California, nor much less provincial. What is different is knowing a town that one has never seen, as sensible travellers may do, who wish to save time and energy when they arrive. This sort of knowing is accomplished by the use of a spatial abstraction in one plane; that is to say, by a plan or a map. Now knowing a city in two-dimensional space is very meagre knowledge indeed even of the externals of a city. But it is an example of the sort of enlargement of knowledge that we all look upon as the improvement of the mind. My point is that such improvement of the mind is nothing but the adapting of a learned set of responses of the body to data of a slightly more symbolic sort, schematic data, we may call them.

The plan of a city that we have never seen is a good example of such a complex of schematic data. What are the essentials, in this very elementary case, of the technical knowledge that we call map-reading? And what are the differences between responding to a city as mapped and responding to an actual city? The main difference in the end lies not in the nature of the response itself, but in the scope and range of what our new knowledge allows us to respond to. This knowledge is of a new *kind* only in that, instead of being evidenced in the gross bodily movements from place to place that would be getting about in a city, it is evidenced by those subtler movements that consist in adaptation of our organs to a map instead of a city, and the further ability to convert adaptation to the map into planned locomotion in the city. Moreover, we may do so well that, instead of using this map at all, we become adept at that response to the mere name of a town that consists in spreading out the schematic imagery that we now substitute for the map that was drawn on paper.

All this will have been accomplished by men's having discriminated one aspect of the data that a city furnishes us, so clearly as to be able to attend to it while neglecting all of the city's other aspects. This is of course abstraction. But it is useless to us if we can not connect it once more with the concrete actual city in all its dimensions of space, time, noise, color and any number of other sets of determinations. The aim of such abstracting is to make the complex simple and controllable by leaving out most of it at any one time, while systematically keeping in all the elements of one

or a very few sorts in one or a very few sorts of relations. Having grasped the relations of these elements—in a city plan they are the two-dimensioned spatial relations of spatial elements—we are able to respond to these elements in these relations even when the lengths and areas are enormously reduced in size. For we keep the *relations* in length, in size, and in direction the same. We have thus also incidentally introduced number and measure as other schematic symbolic data that we must learn to control in appropriate responses along with the abstract aspects of spatial extension.

But my meaning must by now be only too clear; for this whole scheme of analysis is perfectly familiar. What I need to add is that all of the various aspects of the concrete world, not merely its spatial character, but all of its other systematically abstractable features, are required for the maximum extension of our knowledge beyond the directly available perceptual field. We can, by systematic condensation of data, present to our organism for perception, and so for intelligent and successful response, the geography of the whole world; and this can be spread further to be no longer geography at all, the earth having become a minute point in the greater spaces that astronomers scan and report upon so accurately.

In temporal relations such condensations are equally familiar. The whole history of the world can be strung on a single chain of dates, must be, indeed, if it is to be intelligible to us as the history of this one world of ours. And history is perhaps the most striking example of the special sort of response to symbolic schemes that constitutes so vast a proportion of what we call our knowledge. My point, however, is that the knowledge of a great historian is aptness in responses within his own perceptual field to language read and heard, to books, to indexes, to maps, to library catalogues. His expertness is like that of the laboratory scientist. His statements are verified in the same way as all statements, by the exhibition of such data as they lead men to expect who understand the language in which they are set down. What constitutes the scope and range is not *this* aptness merely, however, but the relation in which the historian stands to his actual world through all the subsidiary symbolic data that exhibit the panorama of history. The historian who is also a man responds not to the moment or the

present place merely, but to this moment and this place as points in the schematic imaginal data of the whole world of times and places that constitutes the meaning of the books and the libraries, the records and the documents, the tables and the maps, and all the treasures of archaeology. What is taken as the most typical knowledge of the historian, his statement or record of facts—that such and such an event happened at such and such a time and place—is often rather the verbal translation of sections of this schematic panorama than the technical responses to his technical materials. But this translating is partly the bodily aptness that summons the imagery, and partly that other bodily aptness that consists in the expertness of the mechanisms of spoken and written language. It is only an illusion, however, to suppose that those who lack all of the aptness of response that constitutes the historian's *technical* expertness can read history. Those who have not learned to respond to his materials can read the historian's *words*; but without his technique they remain as ignorant of history as most of us do of the meanings of the tables and equations, and the statements in words, that we find in books on physical science. Never to have learned the specific aptitudes that constitute techniques, whether of the laboratory or of the library, is to have lost any chance to have either genuine historical or genuine scientific knowledge. And the pseudo-science and pseudo-history that we philosophers have written is one of the scandals of the modern age.

It must be clear that all the filling of these schematic fields of data to which the man of great learning responds is simply other data. We have not gone far with any systematic surveys and abstractions outside the schemes of space and time. But if we philosophers are not at work on all of these other fields, the psychologists and the artists are. And we shall perhaps catch up with them some day when we can no longer be of much use except as carping critics, the proper descendants of Socrates. What is a little strange, it seems to me, is that philosophers have so hesitated to accept as valid knowledge schemes that work by expanding, instead of contracting, data to bring them into our direct perceptual field.

For example, no such field has ever included the actual earth as a sphere revolving in space about another sphere that is the actual sun. Yet philosophical critics found no difficulty in accepting

the descriptions given by astronomy. When, however, equally good evidence led men to molecules and atoms, to protons and electrons and the rest, it was philosophers that kept insisting that these were mere imaginary entities or intellectual fictions. It was as if size below the perceptual range were a bar to such actuality as is possessed by the solid spherical earth which as so shaped is totally beyond that range. The two modes of schematizing are parallel. One is a spatial abstraction reduced in scale to suit human perception; the other an abstraction on an enormously enlarged scale. This seems to be the whole difference. As to those philosophers who insist that mechanical models are a thing of the past, they would do well to consider first that spatio-temporal analysis is applicable to everything that is *in* the world at all, and second that—so we now hear—the latest and most elaborate application of mathematics to investigations into the physical structure of the molecules of organic chemical compounds uses mechanical models with brilliant success. And naturally, since molecules and their elements are spatial and in spatial relations.

That any elements or relations in terms of which we can analyse and understand and control our concrete world of experience are abstractions is obvious. And there are of course degrees of abstractness. But nothing fails altogether to be abstract except just the full concrete unintelligible mass of experienced nature. All intelligibility begins with abstraction, as all rigorous knowledge does.

But we have not yet indicated the bodily link between even so simple an abstraction as the plan of a city in a *Baedeker*, and our response to the city whose ground-plan we have learned from it. And it is this link that seems to me such convincing evidence that at least this particular extension of knowledge is another case of bodily aptness learned in practised response to perceptual data.

Map-reading depends upon conventions. Of all of these the most elementary is that when we face a map placed right side up, the top of it is north, the bottom south; east is to our right, and west is to our left. To find east and west on a map is to make the distinction of right from left in our own bodies. The naming of this felt bodily discrimination we consciously learn, and this learning will have become knowledge when we have become possessed

of the bodily readiness to respond automatically to the symbols, whether heard as the sounds of the words *right* and *left*, or seen as lines or letters or other devices of printing. The knowledge, then, which by means of the symbolism of maps we may gain of our whole earth and of stellar space, is bodily aptness, the readiness to respond to a perceptual or remembered abstract scheme, which we relate, through the body's aptitude, to action which the body takes in the pursuit of its ends.

Thus knowledge is enlarged beyond the response to data at the level of ordinary perception by the use of schematic data to which our body has so learned to adapt its responses that they serve its purposes equally well. Such systematic abstract schemes are language, symbolism of all sorts, diagrams, the series of numbers that we learn when we learn to count, alphabets, calendars, systems of weights and measures, conventions of writing and printing, and so on endlessly. And an enormous part of our learning is the learning of these schemes. Indeed, without them we should be able to know very little: what we could see with our own eyes and remember without so much as a jotted note, what we could hear and record with our own ears, what we could discover in the field of our ordinary perception and preserve without further aids to memory. We should have to travel fast and far to gain much knowledge thus. And how long could we retain any of it? But learning these schemes is again to practise certain bodily responses until we become apt at making them. The right and left orientation for map-reading is characteristic. No scheme of dates would be of any use to us had we not the backward and forward of memory and expectation in our own bodies. It is the body's wants that rise and define to us the expectancy that is the very ground of what we mean by futurity in a scheme of temporal relations that serves to chart all history.

Other discriminations of other sorts of data are obviously bodily. It is the mechanism of the eye that gives us color contrast. Our bodies are not separate from other things; what they act upon is continuous with themselves. But the signals for response are, at the beginning of learning, the look and the feel of consciously discriminated data. And in the men of greatest learning, while response itself is of necessity bodily—involving, perhaps, the whole

nervous system in microscopic motions or other qualitative changes—it is still guided by data more or less consciously entertained. Only the data are now largely schematic, every part of the scheme capable of being filled in almost *ad infinitum* by the bodily activity upon which we must depend to call up names and images and qualitative differentiations of infinite variety. For surely Spinoza is right: no man commands his memory. It is the infinitely flexible body that responds with this astonishingly full schematic content.

And of course many a great scholar is content to go on filling in his spatio-temporal, qualitative map as his sole occupation. That is his function—as scholar. As a man, of course, he must needs respond directly also in our more ordinarily available world at the common level of sense perception. I suppose that the man of truly universal knowledge would be the man who, when he gets out of bed in the morning, not only responds with motions appropriate to the floor and the furniture of his room, but sees himself as fitting these motions into the vast flow of history spread over the earth through all of recorded time. Such a man might eat his breakfast in the calendar of all feasts and fasts and digest his food and breathe the air as consciously integrated in the whole field of schematic data that natural science has so far systematized for the learned and the skilled.

Thus the higher learning is no less aptness of the body than the simplest knowledge of an infant. But there is the great difference in what a learned man may have at his command to respond to in the vast realms of memory and imagination, and in the schemes of the sciences. And the responses that he makes will accordingly differ from those of a less learned man. Sometimes they will seem footless and futile; sometimes they will seem wise and noble. But they will always have the dignity of the wider context into which they fit, and they may have the inestimable worth of serving other men in a way impossible to any but the scholar of great attainment.

It is, however, not sufficiently recognized, I think, how large a part of all of even the highest learning, dependent as such learning is upon the knowledge of symbolic and abstract techniques such as those of language and mathematics, consists in various sorts of skill in *overt* bodily behavior, even though it is probably true that infinitely complex minute changes in the nervous system are also

involved. What is *not* involved is anything beyond the nerves and the brain and the body to be called a mind, an inscrutable entity in principle not amenable to rational investigation.

But no situation marked out in terms of perceptual data can be counted upon to repeat itself. Even exact qualitative repetition seems infinitely improbable, and literal repetition is a flat impossibility. Thus if all our learning of responses, called behavior, teaches us only the specific aptitude that fits the particular situation, then our learning must fail to give us knowledge. For knowledge must be generalized at least to the point where it will fit a new situation that arises. Knowledge must be for the future if it is to be knowledge at all. Otherwise it is only a past acquaintance with what is itself also past, what is no more. In order to be relevant to anything but the particular data responded to in the learning, knowledge must not only be extended over wide fields of time and space and quality, as we have seen that it can be, but it must also be applicable not to any one situation alone, no matter how extended or inclusive, but to any situation of a particular *kind*.

The theory of knowledge as learned aptness of the body satisfactorily solves this difficulty, however, and in doing so solves also whatever may still lurk in the brains of philosophers as the problem of induction. That is to say, the fact that we learn aptitudes is the fact that we generalize our responses. The formal expression of this fact is the enunciation of the inductive principle, the much sought for justification of that logic without universals which has turned out not to be logic at all but the expression of knowledge. The inductive principle simply formulates our only possible way of controlling our world, a world which comes to us always in novel events marked by differing data, which, however, a learned response adapts itself to, provided that the differences are not too great. Nominalism is intrinsic to science and its methods. The principle of induction is only the meticulous symbolic formulation of the mode of bodily adaptation in behavior that is called learning and results in knowledge.

But this is taking a conclusion instead of reaching it. Perhaps, however, we can reach it without any very great delay. Most philosophers keep on saying that psychology and physiology can never

solve, or offer any help in solving, the difficulties of epistemology or have the least bearing on logical validity. It is, however, noticeable that very few philosophers blind themselves entirely to those psychological and physiological advances in scientific knowledge that would appear to a naturalist to be highly relevant to what is called epistemology, a supposedly non-psychological and non-physiological discipline. I long ago proved to my own satisfaction that logical validity itself is only the moral requirement that language be kept to its own purpose of *bona fide* communication and hence conform to the nature of our world in certain of its most general characteristics. This seems to me in fact to constitute the degree of universality that logic has. At any rate, not having been utterly destroyed for that more serious heresy, I need hardly hesitate to assert that epistemology too, if it has any relation to knowledge at all, must have its problems settled by an empirical analysis of knowing. And since I am insisting that knowing is the aptness of the body to specific motions in response to particular complexes of data, it would be useless now to pretend that I supposed epistemology to have a legitimate transcendental status, instead of being a proper systematization of empirical data from the regions of the relevant sciences. For one who has seen that highest of all philosophical splendors, the moral law itself, recreated by the properly timed and properly forced physical contact of a willow switch with the body of a dog, the idea of epistemology as *falling* to the level of mere physiological psychology is not a shock.

But let me come to the conclusion of all this as shortly as possible. We have noticed that no learning could possibly result in knowledge unless learning were generalized in the very process itself. For we learn before we know, and the situation to which we may have adapted any response in the process of learning, a situation made determinate and specific and particular as data present to respond to,—that situation is gone forever by the time that the learning is completed in the acquired knowledge. Thus the knowledge is of nothing at all unless it fits future *different* situations, presented in terms of new data. But the great fact that has been established about the behavior of the human organism is its adaptability. This is a biological, a physiological, a bodily fact, a deliverance of empirical science concerned with the behavior of

organisms. And such adaptability in behavior is all that we need in order that learning may be generalized into knowledge of *kinds* of situations, or events, or things, provided that knowledge is the learned aptness for specific bodily motions. Learning to swim will not turn into knowledge of Sanskrit. There are limits to adaptability. But learning to ask for sugar in French will teach us most of what we need to learn in order to be able to ask for butter in French. We learn the speech habit that is used to ask for something. It is a little indeterminate, this knowledge; but so is all knowledge. If we have learned how to eat an apple, we shall not have great difficulty in eating another, even though the shape, size, toughness of skin, and all of the other characteristics, are somewhat different in the second apple. We do not learn a response to *appleness*; we respond to a particular apple. And another apple will not be too different not to allow successful response again. If my illustration is trivial, it is because the point seems to have been treated by philosophers with quite inappropriate solemnity.

At any rate, if this illustration will not do, think of the pianist who learns so very general and yet so very precise a technique as reading at sight. By definition this aptitude called sight-reading—and we may learn to read at sight in any language as well as in music—this aptitude is learned in connection with a determinate complex of data that will never come before the learner again in the exercise of it. And yet quite ordinary human beings learn to read music at sight with correctness. In fact something like infallibility here is for professionals a minimum requirement. It would be absurd to object that the new case is identical with previous cases in any significant characteristic. The uniqueness of works of art is a commonplace. And even *were* beauty a common character, it is not beauty that a musician reads from a score, but just the particular intended combination of notes in the particular rhythmic pattern. The point is that he has learned to do this by responding to other and different patterns.

No two apples need be *exactly* alike in any respect to be recognized as both apples. So of other complexes of data that we call kinds of things. So too of complexes in which some of the relations are temporal as well as spatial and qualitative. The kind of a situation that is recognized as a lightable fire-cracker will be responded

to with the expectation of a sound to follow the lighting and throwing of it, just as legitimately as it will be recognized as a fire-cracker. Against those who think the inductive principle unjustified there is thus the *ad hominem* argument that their very naming of any kind of thing or of event or of quality is unjustified, that all learning is unjustified, and that no learning results in knowledge. But the better answer is that knowledge is the word that men invented as a label for just what is learned; that what is learned is aptness of the body in response and nothing else, and that this process, which is carried out largely unconsciously for the most important kinds of learning, is the inculcation of a habit without which, fully formed and completely dominating our whole behavior as organisms, we should not be alive at all. The inductive principle formulates in the highly specialized symbols of our esoteric philosophical language just this fact, which is a fact about expectations justified in the only way in which anything can possibly be justified, *viz.* by turning out to be a satisfying mode of behaving in nature.

Thus not only is it the case that knowledge is the aptness of the body; but it is when we see that this is so that we also see that all knowledge is science, empirical science, based on the unavoidable principle of induction. This principle itself turns out to be a rather abstruse account of the fact that only as we act intelligently in nature, become apt in response to its surrounding matrix, of which we are but elements, do we remain alive. And as Spinoza reminded us, no one who values the good life can help desiring to remain alive; for remaining alive is the primary condition of the good life. The wise man will think of nothing less than he thinks of death. Thus we come back to material well-being as the primary concern of all those for whom spiritual well-being is to have any actuality.

There are a thousand more points to make. There are perhaps half as many that I think I am ready to make and regret having had to omit. But I shall be satisfied if you will grant me the reward that I once before received. After I had opened a sort of debate against Mr. Montague and his belief in universals with what I thought a most convincing demonstration of nominalism, he rose to give his side of the case. He remarked that what I had said

contained the first gleam of light that had ever been cast for him upon the hitherto blank mystery of an intelligent person who could bring himself to take nominalism seriously.

I do not ask you to go so far as to think my account of knowledge altogether intelligible. But I do suggest that this view is worth the most serious consideration. It is suggested, after all, in some passages of Plato's *Gorgias*. It was almost completely sketched in Spinoza's *Ethics*. It has been developed by some of the most brilliant and most learned of modern psychologists. And it is the natural heritage of every American student of philosophy who has not been completely immunized to the thought of Peirce and James and Dewey.

D. W. PRALL

HARVARD UNIVERSITY

MEANING, REFERENCE, AND SIGNIFICANCE¹

THE following remarks are based on an assumption. The assumption is that the meaningful is a state of affairs, that this state of affairs is indicated by common usage of the word *meaning* and its correlates, and that description of this state of affairs is the task which *ab initio* confronts anyone bent on dealing with the problem of meaning. But the assumption underlying many current discussions of the problem is different from this. For what is there avowedly sought is some criterion whereby the meaningful is to be distinguished from the meaningless, the desiderated criterion being formulable, so to say, by resolution in convention assembled. Thus the meaningful is assumed to be determinable by initial definition and, apparently, only by such definition.

To proceed on this latter assumption is doubtless possible in theory. And whoever elects so to proceed is at liberty to set up any definition that pleases him. But the procedure threatens ruin in practice. And the danger is both perduring and insidious.

Any definition thus achievable can be formulated only at the behest of some set of epistemological presuppositions. What is meaningful and what meaningless as thus determined are, consequently, relative to these presuppositions. The definition has force within the universe of discourse which begets it, of course, but not beyond; its application is strictly limited within the walls of the assumptions involved in its formulation. One who does not accept those assumptions is quite without the gates and, consequently, quite beyond the jurisdiction of the definition. And in the event another definition is proposed, as is presumably always in order, neither of the alternatives may be taken as privileged in respect of the other. Each proponent is wedded to his idol, like Ephraim of old, and with a loyalty which alone for him is compelling; neither can decry the other except by laying himself open to the charge of inconsistency.

But precisely because it is concerned with what is central in noetic experience, a definition of the meaningful and the meaningless must issue in something more important than a sterile exercise in linguistic dexterity. Any definition which one takes the trouble

¹ The presidential address to the eastern division of the American Philosophical Association at Princeton University, December 29, 1937.

seriously to formulate will speedily be employed for forensic purposes. Forthwith the trumpets will be sounded, the standard will be raised in the arena, and the sheep will be separated from the goats in its name. And hereupon it degenerates into a question-begging epithet. For as an instrument of construction and criticism it can only be used, on the one side, to impute special sanctity to the presuppositions which fathered it and, on the other side, to cast stones at aliens.

Thus there is formidable reason to fear that, so long as the word *meaning* and its correlates are treated in theoretical discussion as if they were parts of a dolls' house within which the theorist is free to emulate the performance of Humpty Dumpty, just so long will they continue to play their traditional Mephistophelian rôle in philosophical debate—promising clarity and precision, but actually darkening counsel by wrapping important assumptions in the veil of invisibility. If we are ever to escape their wiles, we must not underestimate their credentials; on the contrary, we must receive them openly as being just what they are in historical fact, namely, linguistic signs of a state of affairs which, however to be described in detail, is at any rate the matrix of all our symbolism and is therefore imperious in respect of our epistemological theories. Until the words are thus received, they will in all probability have their revenge by tempting us to mistake our own minions for ministers of fact. When they are thus received, we shall at least have the advantage of recognizing from the beginning what in the end must be, even if only surreptitiously, admitted by all who venture to hold that there is but one acceptable definition of the meaningful; for such a definition can be nothing more than a descriptive account of the state of affairs from whose court these words are the accredited ambassadors.

It is no part of my present purpose, however, to attempt to justify the assumption here confessed. The assumption has been mentioned in order to make it explicit and to emphasize the construction of the problem of meaning entailed by it. In this construction, the problem is to formulate a descriptive account of what is indicated as meaningful by common usage in historically given language-systems, not to formulate a technical definition of what is to be accepted as meaningful or to be rejected as mean-

ingless. The solution of the problem thus construed cannot therefore be by mere proposal; it must be by assertion.² Since the assertion is in reference to an elusive and very complex state of affairs, the solution is difficult. But, if I may repeat this, this construction of the problem in the end confronts anyone who undertakes to deal with the problem of the meaningful and the meaningless and is not content to resolve the issue by fiat.

The aspects of the problem with which the present discussion is concerned are primarily those indicated by the terms *reference* and *significance*. The purpose of the discussion is to inquire what factually is indicated by these terms. The inquiry makes no pretense to be exhaustive. It is designed to be only a step further in analysis of a general position I have suggested elsewhere; and if some things there said are repeated here, this is because they seem to be statements of fact which are essential to the present analysis and which, it is hoped, will at least be clearer in the light of it. That English usage is invoked as an index to what is under survey is incidental to the occasion and is supposed to make no difference in principle, since essentially the same state of affairs would presumably be indicated by common usage in any other historically given language; if this supposition is mistaken, the analysis is to that extent deficient and apparently incorrigibly so.

In the English language, the word *meaning* and its correlates are commonly used for three purposes. These are: to indicate something which is said to be an act of meaning, to indicate something which is said to be a meaning and to indicate something which is said to be meaningful. Together, these probably include all the uses in common speech. The first of the three is open to two interpretations, in one of which it reduces in principle to the third and in the other is foreign to the present purpose; it will consequently be excluded from consideration here. In the second usage, the word *meaning* is a noun indicating some sort of entity; in the third usage, it is a participle indicating some sort of characteristic.

These two usages are readily distinguishable. And having distinguished them, one might be tempted to assume that nothing further remains to be done. One might conclude simply that mean-

² Cf. R. Carnap, "Testability and Meaning," *Philosophy of Science*, IV, 3.

ing may, without more ado, be identified either with an entity which is a meaning or with a peculiar characteristic of something meaningful. And from this one might go on to conclude further that the two sorts of facts thus distinguished can be taken separately and that either may be arbitrarily designated as the fact of meaning quite without reference to the other. And thus, it might be finally concluded, meaning is either some entity or some quality as one prefers.

But to draw such conclusions would be a serious blunder in analysis. Though these facts are distinguishable, they are not in fact separable. Here, at least, Hume's dictum that what is distinguishable is separable does not hold. In every instance where some y is a meaning, there is discoverable some x which means it; it is everywhere the meaning of something. And, on the other side, every instance in which some x is meaningful exhibits some y which is its meaning; everywhere there is a meaning which is its meaning. That what is meaningful and what is a meaning are thus everywhere together seems to be in fact discoverable. But more than this must be said. Not only are the two empirically connected; the connection between them can be seen to be grounded in the meaning-character of each and may in this sense be said to be necessary. The meaning-character of any x which is meaningful entails some y which is its meaning, since its meaning-character is precisely its meaning and therefore entails something which is meant. Likewise, the meaning-character of any y which is a meaning presupposes some x which means it, since its meaning-character is precisely its being a meaning and therefore presupposes something of which it is the meaning. Nothing can be meaningful unless there is something which is its meaning and is related to it as being meant; and nothing can be a meaning unless there is something which is meaningful and is related to it as meaning it. In short, the fact that x is meaningful and the fact that x has a meaning are merely different aspects of one and the same fact, as are the facts that y is a meaning and that y is meant.

From such considerations it follows that the two uses of the word *meaning* here under scrutiny indicate merely different aspects of one and the same state of affairs. This state of affairs is consequently complex, and it may conveniently be identified as

the *meaning-situation*. It appears to be the only factual anchorage for our theorizing about the meaningful and the meaningless. And if it be so, recognition of the meaning-situation is presumably the beginning of wisdom in dealing with the problem.

It would be a mistake to suppose that the state of affairs roughly indicated by the question, What does x mean?, is here an exception. The preceding statement about the meaning-situation has indeed been arrived at by consideration of that situation is if it were a *fait accompli*, and the problematic situation is certainly not such. But between the two there is no difference in principle so far as the features of the meaning-situation above indicated are concerned. The primary difference between them lies in the circumstance that what is meant is determinate in one case while it is indeterminate in the other. This indeterminateness within the problematic situation, however, does not render it an exception to the rule that wherever there is anything which is meaningful it is linked with something which is meant and *vice versa*. On the contrary, this very indeterminateness serves to emphasize the linkage.

Such indeterminateness within the problematic situation does give rise to issues of far-reaching ramifications, particularly in respect of the genesis of meaning-situations. In most instances, at least, a completed meaning-situation is only a collapsed problematic one. Consequently, that which means within a given meaning-situation may be taken apart from what it means on the occasion and may, as thus taken, be said to be meaningful or to have meaning. But this is only an abstract way of speaking about it. The meaning-character which belongs to what is thus said to be meaningful or to have meaning attaches to it because it is the end-product of a previous problematic situation; and as such a product it is essentially linked with something which is its meaning.

Of course, if a way of knowing which does not involve problematic situations be admitted, as, for example, knowing by acquaintance or knowing by direct and non-inferential intuition, then something may be known which is not meaningful in this interpretation. But the question remains whether as thus known it could be said to be meaningful in any interpretation. And there is no justification for an affirmative answer to this question unless what

is thus known is on another occasion supposedly linked, either directly or indirectly, with something which it means.

Several types of meaning-situations are *prima facie* distinguishable. Whether in the end they are irreducible is an important problem of epistemological inquiry; the traditional distinction between knowledge of fact and knowledge of relations, for example, hangs upon the result. But whatever may be the result, the *prima facie* differences are empirically certain. Despite these differences, however, all of the types, with possibly one exception, exhibit a common structure. One aspect of this structure is of central importance throughout. This is the aspect indicated by the word *meaning* in its participial usage, and is the *meaning-relation*.

Every theory of meaning, except that which identifies meaning with a *meaning* and thoughtlessly assumes that nothing further needs to be said, involves some view, implicit or explicit, of the meaning-relation. The view of the relation varies, of course, from theory to theory; and it would perhaps not be an exaggeration to say that the view involved is crucial in respect of the theory in question. The view which gives rise to the major issues traditionally in debate among epistemologists identifies the meaning-relation with the relation of reference. And this is the view with which the following discussion is exclusively concerned. Whether it is the only tenable view cannot here be considered. It is probably the alternative to views which resolve the meaning-relation into some sort of causal or implicative linkage among entities, and such views do not seem to be very promising. But however that may be, it is certainly a view which finds factual warrant within human cognitive situations and so demands consideration on its own account; here, at least, it is of primary concern.

Initial clarity is gained by naming the meaning-relation a relation of reference. The verbal change carries on its face a new emphasis, namely, that on the character of transcendence which everywhere belongs to what means; and this emphasis needs to be made. But the verbal change is of itself quite insufficient to specify the nature of the relation in question. After all, the word *reference* is little less ambiguous than the word *meaning*, and invoking it does not carry us very far. Except for the new emphasis just noted, the mere act of naming the relation a relation

of reference leaves untouched the nature of the relation thus named.

To the end of disclosing the nature of this relation it is helpful to observe, in the first place, that the intransitive use of the verb 'to refer' primarily indicates the relation intended when it is said that the relation of reference is the meaning-relation. 'To refer' and 'to mean' are not equipollent except in those instances where 'to refer' is construed intransitively; and they seem to be equipollent in all such instances. To translate the statement, The prophet refers his message to God, into the statement, The prophet means his message to God, would, for example, not be good usage and no one would normally do so. But it would be good usage and an instance of normal practice to say that the prophet or his message means God instead of saying that the prophet or his message refers to God. Generally: if x refers intransitively, it could normally be said to mean; if it refers transitively, it could not normally be said to mean.

But the relation thus indicated is not a simple two-term relation. If the prophet is said to refer to God, the relation of reference is not merely between the prophet and God; there is implied something through the medium of which the relation obtains, and which is neither the prophet nor God. Or, if the prophet's message is said to refer to God, the relation of reference is not merely between the message and God; there is implied something by virtue of which the relation obtains, and which is neither the message nor God. Generally: if x is said to refer to y , there is always present, either explicitly or implicitly, some z which is involved in the reference; the reference is never between x and y simply. In short, the relation of reference is a triadic relation, and when it is adequately exhibited it is exhibited as being such.

The term to be supplied in the full statement of the relation varies in nature according as what is said to refer is a mind or a non-mental entity. If it is a mind, the term to be supplied is some natural or conventional or symbolic entity; but if some such entity is said to refer, the term to be supplied is invariably some mind. Thus, if the prophet is said to refer, some statement or gesture by means of which he does so is understood; but if the message is said to refer, there is implied some person, either the prophet himself

of some other, for whom it does so. Generally: if x is said to refer and x is a mind, some z must be supplied and z is a non-mental thing; but if the x which is said to refer is some such thing, the z to be supplied is a mind.

Thus the three terms in the referential relationship are a mind, something which is said to refer, and something which is said to be referred to. If we agree to name the second and third of these terms *referend* and *referent* respectively, then we may say shortly that the three terms in the referential relationship are mind, referend and referent. These terms are all awkward, but presumably they will serve the purpose here. The term *mind* is, of course, used for this special purpose without prejudice to other issues raised by it.

When the triadic character of the referential relation is thus explicitly recognized, the function indicated by the transitive use of the verb 'to refer' is re-introduced into the relationship. The referend is now seen to be referred to the referent. And what does the referring is the mind which functions in the relation. It might indeed be maintained that the mind does not refer the referend, but is referred by it; and the contention raises an issue which is not without importance to ultimate epistemological theory. But, even so, the point just here before us remains, namely, that the relation of reference essentially involves the activity of mind. For the referend could refer the mind only through the activity of the mind itself, and this special emphasis would be more closely stated by saying that the mind refers itself through the medium of the referend.

It is, of course, true that reference everywhere involves a psychological complex which is in some interpretation a causal system. It grows out of previous experiences in some manner connected, whether after the fashion of the associative linking of the old psychology or after the newer fashion of the conditioned reflex exhibited by Pavlov's famous drooling dog. But the relation of reference is not identical with the causal relation in such a system however described, since it has the peculiar characteristic of being corrigible. It is, rather, projected by mind and is in that sense an imputed relation.

Herein lies what justification there is for Humpty Dumpty's pon-

tifical utterance about the meaning of words and for similar utterances about symbols generally. Whatever is a referend refers to that which it is made to refer to, and it is a referend because it is made to refer. So far, meanings are quite relative. Anything and everything is meaningful if it is made to function, directly or indirectly, in a relation of reference; and in the sense in which the meaningless is to be taken strictly as the antonym of the meaningful in this construction, anything and everything is meaningless if it is not thus made to function.³ For this reason it would appear that the effort to determine the meaningful and the meaningless by initial formal definition is in principle hopeless.

But the relation of reference is not merely imputed. The referential relationship is not the only relationship within the referential situation. There are others, and these are not imputed by the mind functioning in the reference. On the contrary, they are quite independent of that mind; perhaps no epistemological theory has ever in principle denied this, unless somebody has advocated extreme solipsism. Consequently, since the relation of reference is through the medium of the referend linked with them, that relation cannot be said to be merely imputed. And this needs emphasis.

The referend is always more or less complex. On one side, as has been noted above, it is in some manner the product of past experience on the part of the mind which on the occasion refers it; and this experience runs indefinitely into the past of that mind and out beyond it into its social matrix. On the other side, the referend is in some manner an object or entity in its own right, with a structure and relations independent of the mind which on the occasion happens to function in the reference. On this side the referend and its relata constitute an indefinite number of relationships, all of which are readily distinguishable from that of reference.⁴

³ In making this assertion I do not wish to deny the principle involved in Dewey's helpful distinction between what he calls "immanent" and "referential" meaning. Nor does the assertion deny this distinction in principle, if the consideration that immanent meanings are only the end-product of referential meanings is taken seriously.

⁴ The statements of this paragraph are based on the assumption, not here justified, that a given meaning-situation is meaningfully connected with other meaning-situations. They would not hold, if the referend were something non-inferentially present—a 'mere datum' or 'essence' or 'atomic fact'—as an object whose nature is wholly disclosed in the momentary

Among these relationships, some are ordinarily said to be irrelevant to the reference while one at least is said to be relevant. Presumably all would be relevant if the doctrine of the internality of relations, at least in its extreme formulation, is solid. But whether that doctrine is solid is precisely the question whether relevancy is thus inclusive; and *prima facie* at any rate it is not so. Nor does analysis of terms and relations taken in the abstract seem to be a very promising method of resolving the issue thus raised. What is called for is, rather, analytical inspection of the reaches of relevancy as it is *ab initio* accepted by all.

Whatever its scope, the relationship which is constituted as indicated above and which is relevant to the reference in question is what I shall here name the *contextual relationship* of the referential meaning-situation. The relation involved is the *contextual relation*.

We all assume that it is possible to determine what is relevant to a given reference, at least with sufficient precision to enable us to look in the right direction and with sufficient definiteness to enable us to recognize what we are looking for when we find it. This must be possible, I take it, if references are to be corrigible. How it is possible is a crucial question for logical theory in respect of which theories diverge. But one assertion may be made with some assurance: the referend is the term with which any theory must begin. For the question asks what is relevant to the reference; and it can be answered, if at all, only by starting with what is in reference. This is the case, even if what is in reference is held to be only a mental entity. And it is also the case, if the contextual relationship above indicated and affirmed is admitted. For the referend is alone common to it and to the referential relationship, and it alone lies on the hither side of the relationship asked for.

Only two general remarks can here be made on the epistemological issues raised by the assertion that the referend is a common term between the referential and the contextual relationships. The first remark is that the point in debate between monists and dual-

apprehension of it. But how such an object could function as a referend, except by chance association, it is difficult to see; and even such associative linkage would presumably presuppose at least some temporal and spatial relations of it. In any case, it seems empirically certain that most referends are not thus self-contained.

ists calls for a formulation which is different from the one frequently given. What is at issue is the contextual setting of a complex referend, not the psychical status of some simple datum or essence. In this construction such emphases as those of Bradley on "immediate experience" and of Whitehead on the perceptual mode of "causal efficacy" and of Mead on "sociality" are, for example, emphases which in principle no adequate discussion of the question can overlook. And with such emphases taken into account, the question will be seen to be concerned with two aspects of a meaning-situation and not with two quite disparate relationships. The second remark has to do with the not uncommon assumption that the question arises only in connection with those referential situations in which the contextual relationship involves so-called 'matters of fact' and is not pertinent to those in which the contextual relationship is constituted by what are sometimes called 'relations.' This assumption is open to doubt. After all, the question is about the linkage of the relation of reference with the contextual relation; and it is certainly not obvious that there is any essential difference between the two sorts of meaning-situation in respect of the point at issue—except, of course, on the further doubtful assumption that in the latter the contextual relationship is such that reference within it is not characterized by transcendence.

Returning from this excursus, we must next note that there is at least a *prima facie* distinction among referential situations. In some, the contextual relationship is apparently by nature; in others, it is clearly by artifice. The former are those situations within which the contextual relationship is apparently not mind-dependent, as in the instances where supposed natural objects or logical entities are in reference; here the contextual relationship would ordinarily be said to be a causal or an implicative system. Where some artifact, such as a traffic signal or a linguistic expression, is in reference, however, the contextual relationship is clearly mind-dependent and is consequently not by nature but by artifice; it is a set of conventions, either constructed or historically given.

That this distinction among referential situations is empirically observable presumably cannot be denied. That it is ultimate for analysis may be, and indeed has been, denied. Whether in the end

it is to be left standing is a question in respect of which no presumption is here intended. What is urged is merely that the distinction is *prima facie* warranted.

But whether the contextual relationship be by nature or by artifice, it is not imputed by the mind which functions in the occasional reference. This is clearly the case in those instances where it is by nature; and where it is by artifice, the mind on which it is dependent is not the mind functioning in the reference. Everywhere it is quite independent of that mind and is presented to it through the medium of what is in reference. Consequently, the referential relation is nowhere merely by fiat; it is not wholly imputed.

The corrigibility of reference lies in this linkage with the contextual relationship. This relationship is therefore what is factually indicated by the phrase "significance of reference." It is what is in question when the logical ground of reference is asked for. But there is a complication here which calls for consideration.

Asking in any instance of reference what is its ground, one speedily discovers that three different answers are possible and that each is relevant to the question. In the first place, the answer might be simply that the reference is its own ground, that it obtains because it is actually projected. Or, in the second place, it might be said that the ground of the reference is the belief exhibited in it, that the reference obtains because the mind functioning in it happens to believe that referend and referent are connected as the reference affirms. Or, finally, the answer might be that the ground of the reference is the fact in the case, that the reference obtains because referend and referent are in fact connected as the reference affirms.

It is clear that these three answers are severally distinct, since what is asserted by one of them is not identical with what is asserted by the others. It is also clear that any one of them might satisfy on one occasion and not on another, or that on occasion one of them might satisfy and the others not. This does not show, however, that the question is darkly ambiguous; it shows, rather, that the object of inquiry is complex. What is indicated by each of the three answers is one aspect of the situation exhibited in the reference in question; and one or another answer is regarded as appropriate and satisfactory, or not, according as it is supposed that

one or another aspect of the situation is called for by the question.

The first two of these three answers taken together constitute what is sometimes called the psychological ground of the reference. But whether taken separately or together, these two answers are never finally satisfactory. If it be said that a given reference obtains because it is actually projected, the further question why it should be projected is both relevant and inescapable. And if to this further question the reply is that the reference is projected because the mind functioning in it believes referend and referent to be connected as affirmed, the still further question why the mind so believes is in its turn both relevant and inescapable.

It might be supposed that the answer to this latter question is that the belief is grounded in some sort of associational complex or in some cultural pattern of beliefs or both. But this answer is not finally satisfactory. It is doubtless the case that every belief involves some sort of associational complex, and in this sense every belief may be said to be causally determined. It is also doubtless the case that every belief involves some sort of cultural pattern of beliefs; the psychological ground of belief is everywhere both biographical and social. But such considerations do not offer a satisfactory answer to the question why the reference projected by the belief obtains—not, that is, unless the corrigibility of reference is in the end definitely surrendered. Here the appeal must be to another state of affairs, namely, the contextual relationship of the referential situation within which the reference obtains. Both the believer and the critic of the belief would if pressed make this appeal, and both would agree that here the final ground of the reference lies.

Thus, the last of the three answers to the question before us is alone finally satisfying. That the reference in question obtains because the facts are as they are affirmed to be is an assertion which, if solid, ends debate. Once the assertion is made, the assumption is that no further question can be asked; nor can it be, unless the assertion is mistaken. Granting that the reference obtains because the facts are as affirmed by it, then there is an end to logical scruples about the reference.

It is for this reason that the contextual relationship of the referential meaning-situation must be said to be what factually is to be

understood by the phrase 'significance of reference'. The associational complex and the cultural pattern exhibited in the belief which projects the reference are indeed important aspects of the total situation. But they are not what is asked for when the question of logical significance is raised; that lies elsewhere in the situation, and is precisely the contextual relationship. This is *the fact* which is logically ultimate in respect of the reference, and is consequently the logical significance of it. Significance as the value which attaches to anything is a different matter and involves issues which lead beyond the scope of the present statement.

The term *referent* is sometimes, perhaps commonly, used to indicate the significance of reference. As thus used, however, it indicates what ought to be referred to, not what is actually referred to. Thus it assumes the distinction between the referential relationship and the contextual relationship above urged, and in the end it identifies significance with the latter. Consequently, despite the verbal difference, there is no essential difference in conception of significance from that here defended. But the usage is ambiguous, or at least threatens ambiguity; for it is not easy to avoid the assumption that the referent properly belongs to the referential relationship in the sense in which it is that to which something is actually referred. It would seem preferable, therefore, to use the term in this application and to make use of some other term to indicate what must be referred to if the reference is to be logically stable. *Signification* suggests itself as such a term.

In any case, whatever be our terminology, the referential and contextual relationships within the meaning-situation must be distinguished and the logical ground of reference must be identified with the latter. If it is identified with the former, reference then loses its corrigibility. For then what is signified is precisely what is referred to, signification then coalesces with referent as a term in the referential relationship, and consequently no reference can be at fault. Significance as logical ground has vanished; the only ground left standing is the psychological ground, and the fact of reference is its own sufficient warrant. The referential relationship, in short, is then wholly imputed.

Abiding strictly by the usage here defended, we are at once committed to the conclusion that every reference has significance and

no reference wholly lacks significance. Indeed, the statement that every reference is significant is tautological, if the preceding analysis is sound. For, as has there been affirmed, every referential meaning-situation is featured by a contextual relationship which is integral to its structure.

This, it may be suggested in passing, is the warrant for the contention that all meaningful statements must be testable; and it is the sole warrant. It is what should be intended by those who maintain that thesis; so far as it is intended, the assertion is a statement of fact. If it is intended, however, references cannot be divided into those which are meaningful and those which are meaningless; this is possible only by arbitrary definition. Whether there is a common criterion for all references will be touched on below.

It is indeed not infrequently asserted that some references are insignificant. It is therefore necessary to inquire what in fact is affirmed by such assertions. And since the supposed force of much criticism is apparently derived from them, the inquiry is not without its practical bearing. The thesis here to be defended is that such assertions are confused by still another use of the word *significance*; what in fact is affirmed by them is that the reference in question is mistaken or unimportant, not that it is quite without significance.

It has been maintained above that some mind is everywhere integral to the referential meaning-situation—the mind, namely, which functions in the reference. On occasion, however, a second mind may be involved—the mind, namely, which on occasion makes the meaning-situation itself its object of inquiry. To distinguish these two minds, the first may be named the *perspective* and the second the *observer*. These minds may be existentially distinct; but they may also be one and the same mind, as is presumably the case in every instance where a person becomes critical of his own beliefs and subjects them to scrutiny.

Now the contextual relationship within a given referential situation may be specified either from the standpoint of the perspective or from the standpoint of the observer. And, except in any instance where the observer deems the reference logically grounded, the two specifications will differ more or less widely. Thus, for example, in the instance of a primitive mind and a flash of light-

ning the context may be specified from the point of view of the untutored mind for which the flash refers to some deity or from the point of view of a tutored mind which, observing the reference, calls it credulous. And the two specifications are, of course, very different. The first is the context as delimited within the cultural pattern of beliefs exhibited by the mind for which the flash refers to a deity or, if you prefer, which by the flash is referred to a deity; the second is the context as delimited within the widely different cultural pattern of beliefs exhibited by the tutored mind for which the reference is, say, to some state of affairs in the clouds. Strictly speaking, this distinction can be drawn only by the observer, since the contrast is not open to inspection by the perspective; but, as already noted, one and the same person may be at once perspective and observer.

When an observer is, as we say, trying to understand the reference, what he in fact is trying to do is to determine the contextual relationship from the standpoint of the perspective. The relationship is everywhere thus determinable in principle, otherwise exercise of the so-called historical sense is intrinsically impossible and understanding between person and person, even though face-to-face, is unattainable. And if the observer is a person of good will and is not over-zealous in looking for witches or in magnifying his own originality, the relationship can thus ordinarily at least be determined. It is what is primarily asked for by the question, What in fact does John Doe actually mean? Certainly determination of it is pre-requisite to any criticism of a position which is to be other than merely external and to any discussion which is to be something more than futile assertion and counter-assertion.

Having thus determined the contextual relationship, the observer may accept it. He then calls the reference significant, and points to the context as its logical ground. What happens in that event is that no discrepancy of importance is noted between the contextual relationship thus determined and the observer's view of it. The two are seen to be essentially identical. This takes place wherever one person intelligently agrees with another, or where a single person subjects his own reference to critical scrutiny and finds it satisfactory.

If the two specifications of the contextual relationship remain distinct, however, doubt is cast on the reference in question. And

if the discrepancy between them involves what the observer regards as important features, he may reject the reference of the perspective outright and call it insignificant. But in so saying, if he knows what he is about, he will not intend by that to assert that the reference is quite without significance; he will intend, rather, to assert that the significance of the reference is not adequately exhibited in it. Strictly speaking, he does not reject the reference; he rejects the specification of the context.

It is instructive to note precisely what happens here. The observer sets aside the contextual relationship as specified from the point of view of the perspective and substitutes the specification of it from his own point of view. Thus the old meaning-situation is supplanted by a new one in which the observer's mind becomes the perspective and the reference is grounded in the context as thus determined. This critical procedure is, of course, based on an assumption. The assumption is that the context as specified from the observer's point of view is logically more important than that specified from the perspective functioning in the rejected reference. This assumption is apparently inescapable in criticism, whether of one's own references or of those of another. Thus does preference enter inevitably into critical reasoning, as the pragmatists have rightly urged. Whether the assumption is debatable and, if so, on what grounds is a question which is crucial for logical theory and in principle is at least as old as the controversy between the Sophists and Socrates. Nor can there be any doubt that the assumption is debatable only if the preference is not arbitrary.

If the preceding analysis is correct in its main result, the preference is not arbitrary. The contextual relationship preferred is but a new specification of the state of affairs whose old specification is rejected, and it is preferred because it is supposed to be a closer specification. Thus, if the tutored mind were asked why the reference of the lightning-flash to a condition in the clouds is to be preferred to its reference to some deity, the answer presumably would not be in doubt and would be to the effect that the former reference more closely exhibits the nature of the flash than does the latter. Generally: if the determinate contextual relationship which grounds the reference of x to y is set aside and the determinate context which grounds the reference of x to z is substituted

for it, the one is rejected and the other is accepted because of the supposition that the former fails to disclose the context of x while the latter succeeds. In all of this the critic himself may, of course, be mistaken; but if he is and if inquiry is pressed, what is in reference will presumably call him in turn to account.

But in this procedure, however justified otherwise it may be, the critic is not at liberty to assert that the rejected reference is wholly without significance and that his alone is significant. If he makes such an assertion, it is merely an exhibition of unwarranted dogmatism on his part. What at most he is at liberty to assert, if his criticism is sound, is that the rejected reference is mistaken or unimportant while his is grounded in fact and is consequently true.

This critical procedure, it may be noted, adumbrates the ideal of knowledge generally. Unless there can be said to be knowledge of the meaningless, that is, something which is not in reference, as has sometimes been maintained, the acquisition of knowledge is identical with the progressive exploration of the contextual relationship of what is in reference. In other words, the acquisition of knowledge is penetration into the significance of reference. As specified on occasion, this significance usually presents a penumbral aspect. Should a meaning-situation be achieved in which the significance of what is in reference is fully specified by the perspective within that situation, this penumbral aspect would disappear and the situation would be an instance of what might be called absolute knowledge; in such a situation the significance of the reference would be fully exhibited in the perspective.

It is sometimes supposed that this ideal is in principle unattainable where existents are in reference. The attainment of it, however, seems to be approximated in those instances where postulates are in reference. And it would presumably be fully attained in tautological situations. Such considerations doubtless are involved in the traditional hesitancy to admit the possibility of knowledge of 'matters of fact,' in the traditional tendency to identify knowledge with *a priori* construction, and in the recent worship of tautology. The question still remains, however, whether logical certainty is inseparably linked with absolute knowledge. But all of this lies beyond the scope of this discussion.

Returning to the main theme, I wish to recur briefly to the fact noted above that different types of meaning-situations are *prima*

facie distinguishable. Consideration of this fact may serve to throw further light on the statement that every reference has significance. And I am anxious at least to clarify that statement.

However many types of meaning-situations might be disclosed by an exhaustive classification, four are readily distinguishable. These are the conventional, the linguistic, the postulational, and the existential types. In the conventional type, what is in reference is some artifact, such as a traffic signal or a dogma, and the contextual relationship is some set of constructed conventions or some historical creed. In the linguistic type, what is in reference is a word or sentence and the contextual relationship is the historically given language-system, or language-systems, in reference. In the postulational type, what is in reference is a symbol or symbolic expression and the contextual relationship is some set of postulates and definitions and rules of procedure exhibiting a structure which presumably is in some sense by nature and not by mere convention. And, finally, in the existential type, what is in reference is some supposed natural object, in contradistinction to an object of artifice as mind-dependent, and the contextual relationship is some supposed set of facts with a structure which is by nature in the more common usage of that word.

It may very well be the case that these four types of meaning-situations (and any others, if there are any others) can be reduced in principle to one type. It is clear, for example, that anyone who is to hold that the so-called existential type is irreducible must first have reckoned with Hume; and it may be doubted whether Hume's dictum that "custom is the great guide of human life" when taken strictly within his own premises leaves him free to admit the possibility of more than one irreducible type. And if contemporary efforts to construct a universal language of science which is to include all meaningful statements are to succeed, all types must in the end be reducible in principle to one. On the other side, it is by no means clear that the purely linguistic and conventional types are reducible. And the traditional distinction between 'truths of reason' and 'truths of fact' points in the direction of a sharp separation between the postulational and the existential types, though Leibniz at least experienced considerable difficulty in keeping them separate.

But whatever may be the proper solution of this problem, it is

empirically certain that several types of referential situations are *prima facie* distinguishable. Any assertion that they are, or are not, reducible stands in need of proof. To assume without proof that either is the case is to beg fundamental epistemological issues, since such issues are determined by either assumption.

The point to be emphasized here, however, is independent of the outcome of this controversy. And that point is this: the phrase 'significance of reference' can in principle be given a general factual statement, or not, according as the *prima facie* distinguishable types of meaning-situations are, or are not, reducible to one basic type. If they are thus reducible, such a statement is theoretically possible; and it would be descriptive of the contextual relationship involved in the basic type. But if they are not thus reducible, no such single statement of the significance of reference is even theoretically possible. In that event, significance of reference would vary from type to type of meaning-situation; and the sorts of descriptive statement called for in stating what in fact the phrase indicates would be as numerous as the types left standing as severally irreducible.

When it is here said, then, that every reference is significant and no reference wholly lacks significance, the statement is not to be construed as asserting either that every reference is true or important or that each reference has the same significance as any other in the sense that all references in all meaning-situations are testable by appeal to one and the same criterion. What is asserted is, rather, that every reference is linked with some contextual relationship, namely, that which is integral to the structure of the meaning-situation within which the reference in question falls and which is on the occasion specified in the perspective. Whether this relationship is essentially the same as the contextual relationships in all other meaning-situations is a question to be answered only by further analysis of meaning-situations. Whether it would be said to be true or important, or not, depends on its occasional specification in the perspective and the comparison of this specification of it with that from the point of view of a critical observer.

Thus, the assertion that a given reference is insignificant affirms in fact only that the reference is mistaken or unimportant. If made with the intention of denying that the reference has any significance whatever, the assertion itself has significance only as a con-

text delimited and determined by an initially accepted definition of the meaningful whereby the claims of the reference in question are *ab initio* voided. The practice of using the term *insignificant* as if it were a clencher in philosophical debate, or elsewhere in rational controversy, is thus quite unwarranted, or warranted only by a question-begging definition. Our disputes about significance are in fact disputes about interpretations of what is in reference. In such controversies, reference is our point of departure and significance is our compass; what is to be discovered the voyage itself can alone disclose, and our differences are concerned only with various readings of the compass.

In his "Remarks" before a special session of this Association last year, Professor Whitehead made a statement which I venture to quote in closing. Though I have no right to appeal to the authority of this statement in support of anything I have said, I do entertain the hope that it indicates a general position of which some of the details are outlined in the foregoing analysis. And I entertain this hope, because the statement seems to me to summarize the view here defended. "The endeavor to make our utmost approximation to analysis of meaning," the statement says, "is human philosophy. . . . We enjoy the detail as a weapon for the further discrimination of the penumbral totality. In our experience there is always the dim background from which we derive and to which we return. We are not enjoying a limited dolls' house of clear and distinct things, secluded from all ambiguity. In the darkness beyond there ever looms the vague mass which is the universe begetting us."⁵ The point of this statement, as I understand it, may be translated into the terminology of the preceding analysis roughly as follows: All of our reasoning, so far at least as it proceeds through the medium of referential meaning-situations, aims at the clarification of points of view centering around what occasionally is in reference; and this clarification is achieved by exploration of the significance of reference, that is, the contextual relationship of the referential meaning-situation, as it is progressively specified through penetration into the penumbral nature of what is in reference.

G. WATTS CUNNINGHAM

CORNELL UNIVERSITY

⁵ *The Philosophical Review*, XLVI, 178, 179.

PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL ASSOCIATION 1937

ELEVENTH ANNUAL REPORT OF THE BOARD OF OFFICERS

American Council of Learned Societies

The eighteenth annual meeting of the Council was held at the Hotel Montclair, New York City, on January 29-30, 1937. The Association was represented by its delegates, C. J. Ducasse and S. P. Lamprecht. The Secretary represented the Association at the thirteenth annual conference of Secretaries of the Constituent Societies on January 28, and was also present at the meetings of the Council. Throughout its deliberations, the function of the Council as a planning and coördinating agency rather than, as in the past, an operating organization for special projects, was emphasized. Professor Ducasse reported on the progress and needs of the Bibliography of Philosophy. It was voted that the good offices of the Council be made available to the Association in seeking funds for the completion and publication of this Bibliography.

The constitution of a Committee on the History of Ideas, with A. O. Lovejoy as chairman, was announced. R. W. Sellars was elected a member of the Council's Advisory Board.

At its April meeting the Executive Committee of the Council voted to make available to the Association the sum of \$500.00 as a contribution to the cost of completing the preparation of the Bibliography of Philosophy, contingent upon the balance of the estimated necessary funds being secured. In view of the Council's already extensive assistance to this project and its present limitation of funds for such assistance, this appropriation is a very generous one.

Committees

Permanent Committee on Bibliography

The copy for the bibliography of philosophy for the years 1902-1932, which is being sponsored by the Association, will probably be completed by the first of July next. The funds available were exhausted last November, but Professors Coss and Schneider, under whose supervision the work is being done at Columbia University, have volunteered for the time being to assume personally the responsibility for completion. When the amount ultimately expended for completion is known, a request for reimbursement to them will be placed before the Association.

The bibliography will consist of two volumes; one an author volume, and the other devoted to a classification by subjects. Estimates for printing costs have been obtained, and they come to about \$25,000 for the two volumes. It is believed that when the copy is ready for the printer, outside financial assistance can probably be obtained to make printing possible. The time required to carry through the printing will be about eight months.

For the Committee,

C. J. Ducasse, *Chairman*

Carus Lectures

The committee is gratified to report that members of the Carus family have generously pledged the necessary financial support for a further series of Carus Lectures. The National Board of Officers is requested to proceed at once to the election of three new members for the Carus Lectures Committee.

For the Committee,

Edward L. Schaub, *Chairman*

Publication

Professor Gregory D. Walcott, General Editor of the *Source Books in the History of the Sciences*, reports as follows:

"Some definite progress on this project has been made this past year. Dr. Weinstein has reported considerable work done toward the *Source Book in Zoölogy*, and Professor Cohen has indicated the completion of his survey as to what the contents of the *Source Book in Ancient Science* will be. It is a pleasure to say, too, that a competent translator has been found for the *Source Book in Botany*, so that we may expect rapid progress in that field. Practically all the selections for that work were made several years ago, but the lack of a good translator caused delay. The prospect now is most encouraging. The manuscript for a *Source Book in Geology* is still unfinished, but should be completed soon. It is also worth nothing that the royalties from the *Source Book in Physics* have equalled the cost of producing that manuscript. Further royalties go to Professor Magee, the special editor of that work."

Applications continue to be received for grants in aid of publication offered by the American Council of Learned Societies. One of these has been recommended for a grant by the Committee, and the recommendation has been approved by the Council. The book is by Professor Roger W. Holmes, of Mount Holyoke College, and it has already appeared under the title *The Idealism of Giovanni Gentile*. Two applications are now being considered by the Committee. Philosophers appear as yet to have found little need for the other form of aid offered by the American Council, namely in the duplication of rare manuscripts.

The Committee wishes to call attention to the excellent financial record of the *Source Books in the History of the Sciences* under Professor Walcott's able supervision. So far, interest on the Revolving Fund, together with royalties on the books already published, have fully paid for all expenses involved in the preparation of these books.

For the Committee,

E. A. Burtt, *Chairman*

Ninth International Congress of Philosophy

The *Congrès Descartes* was held at Paris, August 1-6, 1937. Some fifteen members of the American Philosophical Association read papers, and about twice that number were present and participated in the deliberations of the Congress. The *Proceedings* are published, in twelve volumes, by Hermann et Cie., Paris. The funds at the disposal of this committee were divided between D. S. Robinson and J. E. Boodin, designated as representatives of

the Western and Pacific Divisions respectively, for the equalization of travelling expenses.

For the committee:

Arthur E. Murphy,
W. P. Montague

FINANCIAL STATEMENT

Year Ended December 31, 1937

*Cornelius Krusé, Acting Treasurer,
American Philosophical Association
Middletown, Connecticut*

DEAR SIR:

In accordance with your request we have examined the accounts and records of the American Philosophical Association for the year ended December 31, 1937.

All recorded receipts were found to have been deposited and all expenditures were evidenced by cancelled checks and supporting vouchers.

Bank balances were verified by comparison with balances shown on the bank statement of The Middletown National Bank, Middletown, Connecticut, and pass book (number 70787) of The Rhode Island Hospital Trust Company, Providence, Rhode Island.

Based upon the foregoing, we hereby certify that the attached statement of receipts and disbursements reflects the results of the financial operations for the year ended December 31, 1937.

Respectfully submitted,

KNUST, EVERETT & CAMBRIA
Certified Public Accountants

Middletown, Connecticut
January 7, 1938

	General Treasury	Fund for Revolving Publication	Fund for International Congress of Philosophy
<i>Cash Balance—January 1, 1937</i>	\$ 550.15	\$ 9,898.38	\$ 166.83
<i>Cash Receipts:</i>			
Eastern Division	319.63		
Western Division	115.43		
Pacific Division	50.96		
Royalties (McGraw Hill Co.)		83.40	1.65
Interest on bank deposits		149.65	
Sale of volumes	2.00		3.00
Total	1,038.17	10,131.43	171.48
<i>Cash Disbursements:</i>			
Stenographic and clerical expenses..	9.00		
Audit, 1936	10.00		

Stationery	5.25		
American Council of Learned Societies—Dues	25.00		
Printing and binding, Volume X, PHILOSOPHICAL REVIEW	170.17		
Printing <i>Proceedings</i> , 1937	86.03		
Printing articles by Professors Dewey and Whitehead	53.77		
Travel grant, D. S. Robinson			68.58
Travel grant, J. E. Boodin			102.90
Payment of Royalties to W. F. Magee		21.78	
Payment for translation for Science Book in Botany to A. C. Noe		36.00	
Total	359.22	57.78	171.48
Balances—December 31, 1937	\$ 678.95	\$10,073.65	Account Closed

Recapitulation of Funds

General Treasury (Middletown National Bank—Checking Account)	678.95	
Revolving Fund for Publication (Rhode Island Hospital Trust Company—Savings Acc. #70787)	10,073.65	
Fund for International Congress of Philosophy (Rhode Island Hospital Trust Company—Savings Acc. #70815)		Account Closed
Total—All Funds.....	\$10,752.60	

The Board of Officers by unanimous vote accepted an invitation to the Association from the American Association for the Advancement of Science to become an affiliated society in that Association.

By unanimous vote the Board approved the following amendment to Article III, Section I, of the Constitution of the Association, for submission to the Divisions:

"To the first sentence of Section I, add 'and a secretary, elected by the foregoing members for a three year term and eligible for re-election'. Strike out sentences four and five of this section."

By unanimous vote the Board of Officers accepted an invitation from the Organizing Committee of the International Congresses for the Unity of Science to act as a sponsoring organization of the Fifth International Congress for the Unity of Science, to be held at Harvard University, September 5-10, 1939.

By unanimous vote the Board approved a suggestion from the Western Division that letters be sent to Mrs. Moritz Schlick and to the Rector of the University of Vienna expressing sorrow at Professor Schlick's death and an appreciation of his personality and work. The letters were accordingly sent, with the signatures of the Chairman and Secretary of the Board of Officers, as well as those of the President and Secretary of the Western Division.

The chairman of the Board of Officers appointed J. H. Randall, Jr. a member of the committee on Publication for a five year term.

For the Board of Officers,

CORNELIUS KRUSÉ, *Acting Secretary*

WESTERN DIVISION

President: J. A. Leighton

Vice-President: Karl Schmidt

Secretary-Treasurer: Alburey Castell

Executive Committee: The foregoing officers and V. C. Aldrich, Meritt H. Moore, J. W. Hudson, Charles M. Perry.

The thirty-eighth annual meeting of the Western Division of the American Philosophical Association was held at Knox College, Galesburg, Illinois, on April 22, 23, 24, 1937.

The following program was presented:

History of Philosophy:

- The Social in Early Greek CosmologyH. Martin
- The Psychology of Valuation in PlotinusJ. S. Marshall
- Kant's Relation to the British MoralistsP. A. Schilpp
- The Philosophy of Moritz SchlickH. Feigl

Metaphysics:

- Substance as Locus of MeaningW. D. Oliver
- ImmortalityV. C. Aldrich
- Comments by Messrs. Schlick and Ayer
- NegationG. Mueller
- In Search of Scientific MethodH. D. Roelofs

Symposium:

- Empiricism and the Language of ScienceR. Carnap
- Comments by R. McKeon, C. H. Langford, O. Helmer, A. C. Benjamin, H. Feigl.

Aesthetics:

- A definition of the Aesthetic ExperienceE. Vivas
- The Ugly: Dissatisfied ImaginationB. Morris
- Anthropological Approach to AestheticsR. Pray

Ethics:

- The Escape from Moral SkepticismA. E. Avey
- Types of Moral Values and Moral ConsistencyW. A. R. Leys
- On the Meaning of Objective in EthicsG. R. Geiger
- The Sacramental Concept of VirtueJ. S. Boughton
- Value in Contemporary EducationJ. A. Lynch

Philosophy in Contemporary Literature:

- The Philosophy of Thomas MannV. M. Ames
- Mr. Krutch and Ideal Values in LiteratureJ. W. Beach

André Malraux: an interim's ethik P. B. Rice
 American Fiction and Democracy J. W. Hudson

Public Lecture: The Theology of the Earliest Greek Philosophers
 W. Jaeger
 Presidential Address: Peirce, Mead and Pragmatism C. W. Morris

Symposium:

Value and Existence D. H. Parker
 Comments by H. O. Eaton, R. C. Lodge, V. Michel, T. V. Smith, D. F. Swenson.

Logic:

Logic and the Laws of Nature A. G. Ramsperger
 Structure in Sentence and in Fact W. Moore
 Uncertainty in Analytical and Apriori Propositions G. Williams

The following memorial minutes for William H. Scott, read by A. E. Avey, and for Norman Wilde, read by David F. Swenson, were presented:

On January 11, 1937 Dr. Scott, President Emeritus of Ohio State University, died at his home in Columbus, Ohio. He was in his ninety-seventh year, and was probably the oldest member of the American Philosophical Association. He was born in Chauncey, Ohio, September 14, 1840, graduated from Ohio University, Athens, Ohio, 1862, after three years of study, and was immediately named Superintendent of the Athens schools. He was admitted to the Methodist ministry in 1864. After serving a number of charges he was called to the Presidency of his Alma Mater in 1872, then to the Presidency of Ohio State University in 1883. He continued in this office until 1895, teaching philosophy at the same time and remaining on the faculty as Professor of Philosophy until 1910, when he was succeeded by Professor J. A. Leighton. His attention after his retirement was given to continued study and occasional appearances before school groups. His brief address at the dedication of Clinton School, Columbus, came to be regarded as a classic, and has been used at school dedications throughout the country. He was noted for his high standards combined with kindness in the administration of his duties. He looked carefully after the material and spiritual welfare of the institution under his charge, with a large conception of the place of the state university in the life of the people. His philosophic views were idealistic and his sympathies largely with the standpoint of Lotze. His method in the classroom was Socratic, and he was remembered by his students as a stimulating teacher. His lifelong devotion to high ideals in scholarship and public service made him a revered figure in the community. (A. E. Avey)

Dr. Norman Wilde, Professor of Philosophy at the University of Minnesota since 1898, and Professor Emeritus since 1935, died at Adams, Massachusetts, just before the Christmas holidays in December, 1936. His scholarly accomplishments are attested by more than a score of articles in the technical journals, dealing with ethical and political subjects; some also dealing with the "faith philosophers" in the tradition of Jacobi. He was also the author of *The Ethical Basis of the State*, a book widely used and respected for its sanity of outlook. As a teacher he was clear and persuasive and well prepared; his very presence had, through the thorough assimilation of ideas in his personality, a cultural influence; he was above all a gentleman in the classroom, not without the salt of a quiet wit. As a man he was quiet, modest and unaggressive, but withal firm and independent. He had considerable influence with his colleagues in the formulation of educational policy, chiefly because of his cool and trenchant analysis

and his evident disinterestedness. It was indeed hoped that he would live to finish the work on the history of political philosophies on which he was engaged at the time of his death. Yet his life had in spite of this frustration a beautifully rounded and complete character; his lifework of teaching and thought gave the impression of essentially being done, so that his death was more like a beautiful ending than a tragic interruption. He was a patient, unassuming and reconciling spirit, whose real energy was present in the depths rather than displayed upon the surface. His most outstanding trait was a marked sincerity and a complete integrity of purpose and of act. His nearest colleagues will long feel a sense of deep loss. (David F. Swenson)

On recommendation of the Executive Committee the following were elected to membership in the Division: Alice Ambrose, Rudolf Carnap, Henry Cobb, W. V. Evans, A. C. Garnett, Lewis E. Hahn, Roger Hazelton, Morris Lazzerowitz, Ray Lepley, J. A. Lynch, Bertram Morris, W. D. Oliver.

The following motions were adopted: to extend a vote of thanks to Knox College for its hospitality; to send letters of sympathy to Mrs. Moritz Schlick, and to Professor M. T. McClure; to send letters of thanks to Professor W. Jaeger and to Professor J. W. Beach.

Professor D. S. Robinson was elected delegate to the 9th International Congress, and Professor C. M. Perry as delegate to the 3rd Inter-American Congress of Education.

It was also voted to instruct Professor G. R. Morrow to proceed with the details of the Unemployment Committee.

The following officers were elected: President, J. A. Leighton; Vice-president, Karl Schmidt; Secretary-Treasurer, Alburey Castell; Members of the Executive Committee, V. C. Aldrich, Meritt H. Moore, J. W. Hudson, Charles M. Perry.

The following treasurer's report was approved:

Receipts

Received from former secretary-treasurer	\$523.35
Dues, 1936-37	345.50
Rebate from Edwards Brothers	20.00
	<hr/>
	\$888.85

Disbursements

Cigars and cigarettes for Iowa meeting	\$ 9.56
Division dues to national association	104.08
To Open Court Co., toward W. T. Harris volume	75.00
To Professor J. Coss, toward bibliography	187.00
To Burgess Publishing Co., for annual bulletin	149.58
Stationery, stamps, postals, express charges	48.02
Balance in bank, April 22, 1937	315.61
	<hr/>
Total	\$888.85

Alburey Castell, *Secretary*

PACIFIC DIVISION

President: Ralph T. Flewelling*Vice-President:* W. R. Dennes*Secretary-Treasurer:* Paul Marhenke

Executive Committee: The foregoing officers and D. W. Prall *ex officio* for one year, D. C. Williams (1938), H. C. Lanz (1939), Otis H. Lee (1939).

The fourteenth annual meeting was held at Scripps and Pomona Colleges, Claremont, California, on December 28, 29, and 30, 1937. The following program was presented:

Some Social Implications of the Theories of the Will ..	Everett Dean Martin
The Ethics of Caprice	Robert E. Fitch
Max Scheler's Phenomenology of Religion	E. Parl Welch
The New Rationalism	Harry Ruja
The Dilemma of Definition	John Reid
Definition and Empiricism	Isabel Creed
The meaning of "Reality"	H. Gomperz
A Revolution in Philosophy	J. E. Boodin
Art as an Ethical Problem	H. C. Brown
The Art of Appreciation	J. Loewenberg
Remarks, with piano illustrations, on Beethoven's Appassionata	
.....	Henry Lanz

The Presidential Address

Knowledge as Aptness of the Body	D. W. Prall
Identity and Difference	Barnett Savery
Divisible Unities	Paul Weiss

Some Comments on Some Recent Interpretations of Hume. C. J. Sullivan, Jr.

The business meeting was held on December 30 at 9:30 A.M. The Minutes of the 1936 meeting were approved as printed.

The treasurer's report was read and approved:

Receipts

Balance on hand December 27, 1936	\$413.71
Dues received	164.00
Total	\$577.71

Expenditures

A. P. A. Treasury	\$ 50.96
Smoker (1936)	4.80
Postage	8.15
Clerical help	1.88
Printing and mimeographing	12.12
Bibliography of philosophy	82.00
Total	\$159.91

Balance on hand November 27, 1937	\$417.80
---	----------

Audited by D. A. Piatt

It was voted to accept the proposal of the National Board of Officers that Article III, Section 1, of the Constitution of the American Philosophical Association be amended as follows:

"To the first sentence of Section 1 add, 'and a secretary elected by the foregoing members for a three year term and eligible for re-election'. Strike out sentences four and five of this section."

President Prall announced that an invitation had been received from the American Documentation Institute of Washington, D.C., to nominate a member from the American Philosophical Association to serve on the Institute. President Prall stated that action would be taken in this matter by the National Board of Officers.

The invitation of the University of California for the 1938 meeting of the Division was accepted. Since the Pacific Coast Economics Association and the Pacific Sociological Society would also be meeting at the University of California at that time, it was suggested that one joint session be held at which papers from the three associations be presented. It was recommended that the Program Committee be asked to consider this suggestion.

The Executive Committee presented an invitation from the University of Washington that the meeting of the Division be held at that institution in 1938 or 1939. After discussion, in which it was pointed out that the long distance between Seattle and Los Angeles would make it difficult for members from the south to attend, it was recommended that some expression of willingness to meet in the north in 1939 be incorporated in the minutes of this meeting.

On recommendation of the Executive Committee, the following were elected to active membership in the Pacific Division: Dr. Harry Girvety, Professor Neal K. Klausner, Professor Cornelia G. LeBoutillier, Professor John R. Reid.

Henry Lanz and Otis Lee were elected to the Executive Committee for a term of two years.

The following officers were elected for 1938: President, R. T. Flewelling; Vice-President, W. R. Dennes; Secretary-Treasurer (for a term of three years), Paul Marhenke.

A unanimous vote of thanks was extended to President Edmunds of Pomona College and to the members of the Association at Pomona and Scripps Colleges for their gracious hospitality.

GEORGIANA MELVIN, *Secretary-Treasurer pro tem*

EASTERN DIVISION

President: George H. Sabine

Vice-President: Sterling P. Lamprecht

Secretary-Treasurer: Cornelius Krusé

Executive Committee: The foregoing officers and G. Watts Cunningham, *ex officio* for one year, Raphael Demos (1938), Horace L. Friess (1938), John M. Warbeke (1939), Robert Scoon (1939), Albert G. A. Balz (1939), Paul Weiss (1940).

The thirty-seventh annual meeting of the Eastern Division was held at Princeton University, Princeton, New Jersey, on December 28, 29, and 30, 1937. The following program was presented:

Logic:

On the Foundations of Logic	Everett J. Nelson
Is Logic a Matter of Words	W. V. Quine
On the Probability of Empirical Theories	Carl G. Hempel
(Introduced by Ernest Nagel)	

Aesthetics:

The Aesthetic Object and the Work of Art	George W. Beiswanger
Through the Ivory Gate	Marjorie S. Harris
The Meeting of Extremes in Recent Aesthetics	R. C. Baldwin
The Problem of the Material in a Work of Art	Jared S. Moore

The Aesthetic Object:

The Aesthetic Object	C. J. Ducasse
Artistic Truth	W. T. Stace
Beauty Is Not All. An Appeal for Aesthetic Pluralism ..	W. P. Montague

The Nature of the Causal Relation in the Light of Recent Physics:

Causality in the Light of Recent Physics	Morris R. Cohen
Causality in Field Physics in its Bearing on Biological Causation	F. C. S. Northrop
The Problem of the Freedom of the Will and the Theory of Relativity ..	Boris B. Bogoslovsky

Presidential Address: Meaning, Reference, and Significance	G. Watts Cunningham
--	---------------------

The Technique of Philosophic Observation	Percy Hughes
In Defence of Substance	John W. Nason
Some Problems of Contemporary Dialectical Materialism	John M. Somerville
Comparative Philosophy	R. C. Lodge
A Realistic Theory of Distortion	Everett W. Hall
Positivism as Anthropomorphism	Charles Hartshorne

Joint Meeting with the American Catholic Philosophical Association

The Mind-Body Problem:

A Re-examination of the Dualistic Position	Louis J. A. Mercier
On the Nature of the Union of Mind and Body	W. H. Sheldon

The business meeting was held on Thursday, December 30, at 11:00 A.M., President Cunningham presiding. The minutes of the thirty-sixth annual meeting were approved as printed.

The following Treasurer's Report was approved:

Receipts:

Balance brought forward	\$3,210.76
Surplus from annual meeting	10.65
Membership dues	779.85
Interest	40.25

<i>Total</i>	\$4,041.51
--------------------	-------------------

Expenditures:

Dues to National Association	\$ 108.25
Printing of Annual <i>Proceedings</i>	211.38
Expenses of Annual Meeting	98.20
Printing, mailing of abstracts	20.00
Pro rata share of Eastern Division for Bibliography of Philosophy	431.00
Printing of dues cards, announcements, etc.	42.25
Postage	78.51
Secretarial Assistance	50.01
Miscellany	2.15
Total	1,041.75
Balance on hand	\$2,999.76
Audited and found correct:	
A. G. A. Balz	
Robert Scoon	

A memorial minute for Walter G. Everett was read by C. J. Ducasse and one for Orlin O. Fletcher by W. P. Warren. A memorial for Moritz A. Geiger, prepared by Horace L. Friess, was read by the secretary. It was voted that all be included in the minutes of the Division, and published in the annual *Proceedings*, and they are accordingly here included.

With deep regret and sorrow we record the death of our colleague, Professor Walter G. Everett, on July 29 last in Berkeley, California. Professor Everett was born in Rowe, Massachusetts, August 21, 1860, and entered Brown University in the class of 1885, with which he graduated. He obtained the Master's degree in 1888, the Doctor's degree in 1895, and carried on graduate study for a year at the Universities of Berlin and Strassburg. He began his teaching at Brown in 1894 as Instructor in Greek and Latin. His personal interest and particular study, however, had always been centered upon problems of philosophy. Because of this, and in accordance with President Benjamin Andrews' desire at that time to emphasize the importance of philosophy and to expand the personnel of the department, Professor Everett was in 1896 appointed Associate Professor of Philosophy. Later he was appointed Professor of Philosophy and Romeo Elton Professor of Natural Theology, and occupied this chair until his retirement in 1930. During the year 1912-13 he served as acting-president of Brown University. In 1935 Professor Everett was further honored by Brown when, at Commencement, the honorary degree of Doctor of Laws was conferred upon him. His retirement from regular teaching marked no cessation of intellectual activity; and for several years thereafter he visited, and delivered lectures at, numerous Colleges and Universities in all parts of the country. In 1931 he was signally honored by an invitation to deliver the annual Howison Lecture at the University of California. In 1921 Professor Everett was appointed by the American Philosophical Association a delegate to the Allied Congress of Philosophy in Paris; and in 1922 was elected President of the Association. His greatest philosophical reputation both as teacher and writer was achieved in the field of Ethics. His chief work, the treatise entitled *Moral Values*, received the highest praise in this country and abroad both for its philosophical content and for the outstanding excellence of its literary form. It has been and still is widely used as a textbook in courses in Ethics, and a few years ago was translated into

Japanese by one of Professor Everett's former students. Professor Everett was further honored in being selected a few years ago in a referendum by the American Philosophical Association as one of thirty-four American Philosophers to contribute one of the essays to the two volume collection entitled *Contemporary American Philosophy*. Professor Everett made deep and lasting impression on the many students to whom he lectured during his forty years at Brown, for he loved teaching and gave to it of his best; and his charming personality and unfailing courtesy quickly won their regard and affection. As a friend, to colleagues and other associates, he was unfailingly kind, sympathetic, and eagerly helpful. In him indeed, graciousness of manner was no superficial vestment but rather the spontaneous expression of genuine kindness of spirit and distinction of thought. His students, his colleagues, and in truth all with whom he came in contact felt it a privilege to have known him and to have been associated with him. In his death we have sustained a great loss, but the influence and memory of his devoted work in the service of philosophy will long endure. (C. J. Ducasse)

Orlin Ottman Fletcher who died October 20, 1937, at the age of 90, was one of those superior men who keep their philosophic lights shaded by other interests throughout much of their lives, only to have them burst forth with an unusually illuminating glow in their latter years. Born July 29, 1847, in Scotland, Ontario, Canada, his early education was guided by the maxim that "with a good text-book, a good mind and a will to study, no one needed a teacher". He himself, however, became a teacher when but thirteen and taught throughout his teens and early twenties. In his middle twenties, concurrently, he studied law, intending to make that his vocation, but on the death of his young wife in 1874, he turned to the ministry. For 34 years, 1874-1908, the service of the Baptist Church had his effective statesmanship. Meanwhile, he studied at Chicago University, 1880-83, earning both the A.B. and B.D. degrees in three years while preaching, teaching mathematics, proof-reading for the *Hebrew Review*, and taking charge of President Harper's foreign correspondence. In 1886 he took an A.M. degree at Colgate. He was nearing 61 before he found himself in circumstances in which he felt that he could honestly accept a university appointment. Furman University called him at that time, and from 1908-27 he taught philosophy and social sciences with a comprehensively informed outlook and a constructive view which led his students characteristically to regard him as by much their greatest teacher. In 1913 he published his *Introduction to Philosophy*, a substantial work which circulated over twenty years and won its author an immediate acknowledgment as a strong yet careful thinker. Among the institutions where he lectured on special invitation was Princeton University. Among the manuscripts which he left unpublished were studies in Medieval Philosophy and in contemporary trends and problems. His was a spontaneously inquiring and likewise a continuously synthetic mind. Though a Scottish realist from his early background, he became convinced quite soon in life that a pure objective realism ignores the character of subjects in the experience-equation and lends itself to an unintelligible pluralistic view. Objective idealism, on the other hand, enabled him to take full cognizance of minds as subjects of experience and of the universe as an intelligible whole and yet to "believe in the substantive reality of cognized objects, in the objective reality of their perceived modifications, in the objective reality of cognized relations, and in the objective reality of value and truth judgments". In practice, as in theory, O. O. Fletcher was a realist in his idealism. (W. P. Warren)

In the sudden death on September 9, 1937 of Moritz A. Geiger, Professor of Philosophy at Vassar College, The American Philosophical Association lost a member of rare intellectual and personal gifts. Born on June 26, 1880 in Frankfort, Professor Geiger studied philosophy at Munich, Leipzig, Göttingen, and also for a time at Harvard when James and Royce were teaching. Thereafter he taught philosophy, first at Munich and then in

Göttingen until 1934, when he left Germany and became chairman of the Department at Vassar College. He was also twice a visiting lecturer at Leland Stanford. Moritz Geiger's philosophical views were formed along the lines of phenomenological realism under the double inspiration of Lipps and Husserl. He wrote with special distinction upon the philosophy of mathematics and of esthetics. What was most characteristic and significant was the living rapport of his philosophical thinking with developments in the general intellectual world of our time, in its sciences and arts. It was this rapport, coupled with a most appealing human warmth and a genial love of teaching, that qualified Moritz Geiger to interpret and exemplify the philosophical spirit to his students in a most effective and genuine sense. The success with which, in the short time of three years, he reworked the technical habits of thought developed during years of advanced work in German universities, so as to become a truly philosophical educator of American undergraduates, was an outstanding achievement, quickly acknowledged by the enthusiasm and esteem of his students and colleagues at Vassar. His last published book dealt with the relations between the approach to reality in philosophy and in the sciences. He had recently begun to resume writing after the interruptions occasioned by the last few years. A book on esthetics was virtually completed in manuscript. There also exist chapters of a work devoted to the theme he so finely illustrated in his life: the cultivation of the human personality to a higher form of subjectivity by the mind's endeavor to acquire objective science. Though misfortune did not allow him to complete his work in America, we were greatly privileged to have his philosophical existence established so effectively amongst us for even a brief time. And we shall like to remember also his understanding enjoyment and appreciation of contacts with students and teachers in this country. (Horace L. Friess)

The Nominating Committee (W. H. Sheldon, chairman, Harold A. Larrabee) presented the following nominees: for President, George H. Sabine; for Vice-President, Sterling P. Lamprecht; for new members of the Executive Committee, A. G. A. Balz to serve for two years, and Paul Weiss to serve for three years. All were unanimously elected.

President Cunningham announced the following new appointments to the Nominating Committee: W. P. Montague, chairman, for one year to complete the unexpired term of the late Professor Everett, and C. I. Lewis for three years.

Brief reports from the national committees on Publication and on the Carus Lectures were read by the secretary. Professor Ducasse, chairman of the national committee on Bibliography read the report which appears in these Proceedings. Professor Balz in his capacity as representative of the Eastern Division on the joint committee of the Eastern and Western Divisions on Opportunities for Employment reported the activities and future plans of this committee.

The following recommendations of the Executive Committee were presented to the meeting and unanimously approved: (1) That the Division express to the National Board of Officers its interest in the international bibliography. (2) That the Division propose to the National Board of Officers that the present Committee on Bibliography be constituted a standing committee of the National Association and that it be augmented to include members of the Association who would be suitable to act as liaison agents between the Association and the International Committee on Bibliography. (3) That a cordial vote of thanks be accorded to Professors W.

P. Montague and George P. Adams for the generous gift of \$430.58 to the Philosophical Association for the purpose of aiding members to purchase copies of the first two volumes of the *International Bibliography of Philosophy*. (4) That the invitation of the American Documentation Institute that the Philosophical Association become a nominating agency for the Institute be referred with power to the Committee on Bibliography. (5) That the invitation of Wesleyan University for the 1938 meeting of the Division be accepted. (6) That the Division record its interest in and approval of the study of the status of the liberal arts and sciences in the college curriculum undertaken by the Senate of the United Chapters of the Phi Beta Kappa.

On recommendation of the Executive Committee, the following were elected to membership in the Division:

Active members: Dr. Richard B. Brandt, Prof. Peter A. Carmichael, Prof. Robert F. Davidson, Dr. Frederick C. Dommeyer, Prof. Christopher Browne Garnett, Jr., Dr. Thomas A. Goudge, Prof. Samuel G. Hefelbower, Dr. J. W. A. Hickson, Dr. Allison Heartz Johnson, Dr. Furman Gordon McLarty, Prof. Walter G. Muelder, Prof. Louis William Norris, Prof. Stephen B. L. Penrose, Jr., Prof. R. Bruce Raup, Dr. Pasquale Romanelli, Dr. Alden Weber, Dr. Julius Weinberg, Dr. Frederic L. Will, Dr. Milton Williams.

Associate members: Mr. Sterling E. Hess, Mr. James P. Pettegrove, Dr. Lewis S. Feuer, Dr. Gerhart H. Saenger, Dr. Victor L. Dowdell.

The Executive Committee unanimously recommended the approval by the Division of the proposal of the National Board of Officers that Article III, Section 1, of the Constitution of the American Philosophical Association be amended as follows: "To the first sentence of Section 1 add, 'and a secretary elected by the foregoing members for a three year term and eligible for re-election'. Strike out sentences four and five of this section." By mistaking the provisions for constitutional amendment of the Eastern Division for those of the National Association the unanimous recommendation of approval was presented to the Division but final vote was deferred until the next annual meeting.

On recommendation of the Executive Committee it was voted that the National Committee on Bibliography consider bringing up to date Professor Schneider's Bibliography of John Dewey's writings; and that the program committee for 1939 plan a divisional meeting (presumably at Columbia) in honor of John Dewey.

On motion of Professor Montague a unanimous vote of thanks was extended to Princeton University and especially to the members of its Department of Philosophy for their cordial and gracious hospitality.

At the banquet the following resolutions, presented by President Cunningham, were adopted:

WHEREAS the history of philosophy, as of other branches of scholarship, plainly teaches that freedom of thought, of discussion, of teaching, and of inquiry are essential to the fruitful prosecution of its tasks; and

WHEREAS, at the present time, these fundamental rights of the scholar are often invaded in practice and even denied in principle;

Now therefore we, the Eastern Division of the American Philosophical Association, assembled at our thirty-seventh annual meeting, do publicly affirm our conviction that unhampered investigation and the free interchange of ideas are indispensable for education and for the development of any high form of social and civic life;

And we express to the American Association for the Advancement of Science and to the British Association our hearty approval of their efforts on behalf of the free search for truth, and we authorize the officers of our Association to cooperate with such efforts.

Cornelius Krusé, *Secretary-Treasurer*

OFFICERS AND COMMITTEES OF THE ASSOCIATION FOR 1938

(Addresses are given in the list of members)

Board of Officers:

George H. Sabine, *Chairman* (1938), J. A. Leighton, R. T. Flewelling, Alburey Castell, Paul Marhenke, Cornelius Krusé, *Acting Secretary* (1938), Arthur E. Murphy, *Secretary* (1938)

Delegates to the American Council of Learned Societies:

Sterling P. Lamprecht (1938), C. J. Ducasse (1940)

Committees:

Bibliography—

C. J. Ducasse, *Chairman*, D. S. Robinson, D. W. Prall

Carus Lectures—

E. L. Schaub, *Chairman*, H. B. Alexander, G. P. Adams (1939), C. J. Ducasse (1939), G. W. Cunningham (1939)

Publication—

J. H. Randall, Jr., *Chairman* (1941), G. P. Adams (1938), W. K. Wright (1939), G. S. Brett (1940).

LIST OF MEMBERS

Abarbanel, Prof. Albert, University of Newark, Newark, N.J.
 Adams, Prof. George P., University of California, Berkeley, Calif.
 Adams, Dr. John Stokes, Jr., University of Pennsylvania, Philadelphia, Pa.
 Aikens, Prof. H. Austin, Western Reserve University, Cleveland, Ohio.
 Akers, Prof. S. L., Wesleyan College, Macon, Ga.
 Aldrich, Dr. Virgil C., The Rice Institute, Houston, Tex.
 Alexander, Prof. H. B., Scripps College, Claremont, Calif.
 Alles, Prof. Adam, St. Johns College, Annapolis, Md.
 Ambrose, Dr. Alice, Smith College, Northampton, Mass.
 Ames, Prof. E. S., University of Chicago, Chicago, Ill.
 Ames, Prof. Van Meter, University of Cincinnati, Cincinnati, Ohio.
 Anderson, Prof. Frederick, Stanford University, Calif.
 Anderson, Prof. Fulton H., University of Toronto, Toronto, Can.
 Anderson, Prof. Paul Russell, Lake Erie College, Painesville, Ohio.
 Anderson, Dr. Wilhelm, 4421 E. Washington St., Indianapolis, Ind.
 Angier, Dr. R. P., Yale University, New Haven, Conn.
 Apple, Pres. Henry H., 554 N. Duke St., Lancaster, Pa.
 Aronson, Prof. Moses J., College of the City of New York, New York City.
 Auld, Mrs. J. W., Red Cloud, Neb.
 Avey, Prof. Albert E., Ohio State University, Columbus, Ohio.
 Ayres, Prof. Edith, 838 East Building, New York University, New York City.

Bähm, Dr. Archie J., Department of Philosophy, Texas Technological College, Lubbock, Tex.
 Baker, Dr. John Tull, Columbia University, New York City.
 Bakewell, Prof. C. M., Yale University, New Haven, Conn.
 Balduf, Prof. E. W., Central Y.M.C.A. College, Chicago, Ill.
 Baldwin, Prof. Robert C., Connecticut State College, Storrs, Conn.
 Ballard, Rev. J. Hudson, First Presbyterian Church, Portland, Ore.
 Balz, Prof. Albert, University of Virginia, University, Va.
 Bancroft, Prof. William Wallace, 942 Main St., Collegeville, Pa.
 Barker, Dr. Leo V., Hanover College, Hanover, Ind.
 Barrett, Prof. Clifford L., Princeton University, Princeton, N.J.
 Baum, Prof. Maurice, Kent State College, Kent, Ohio.
 Baxter, Dr. Clayton A., Mount Allison University, Sackville, N.B., Can.
 Baylis, Prof. Charles A., Brown University, Providence, R.I.
 Beals, Dr. Lawrence W., Williams College, Williamstown, Mass.
 Beardslee, Prof. Claude G., Lehigh University, Bethlehem, Pa.
 Beck, Dr. R. Lloyd, Marshall College, Huntington, W.Va.
 Becker, Prof. Frank C., Lehigh University, Bethlehem, Pa.
 Beiswanger, Prof. G. W., Monticello College, Godfrey, Ill.
 Belknap, Mr. George N., University of Oregon, Eugene, Ore.
 Benjamin, Prof. A. C., University of Chicago, Chicago, Ill.
 Bennion, Prof. Milton, University of Utah, Salt Lake City, Utah.
 Bentley, Prof. John E., American University, Washington, D.C.
 Benton, Prof. John Keith, Drew University, Madison, N.J.
 Bernstein, Prof. B. A., University of California, Berkeley, Calif.
 Bertocci, Dr. Peter A., Bates College, Lewiston, Me.
 Bewkes, Prof. E. G., Colgate University, Hamilton, N.Y.
 Bidney, Dr. David, Yeshiva College, Amsterdam Ave. and 186th St., New York City.
 Birch, Prof. T. Bruce, 910 N. Woodlawn Ave., Springfield, Ohio.
 Bisbee, Prof. Eleanor, R.R., 2, Box 710, Tucson, Ariz.
 Bixler, Prof. J. S., Andover Hall, Cambridge, Mass.
 Black, Dr. G. A., 156 Park St., Gardner, Mass.
 Blake, Prof. R. M., Brown University, Providence, R.I.
 Blanshard, Prof. Brand, Swarthmore College, Swarthmore, Pa.

- Blanshard, Mrs. Frances B., Swarthmore College, Swarthmore, Pa.
 Bloté, Dr. Harold C., 228 Scenic Ave., Piedmont, Calif.
 Blumberg, Dr. A. E., Box 67, Johns Hopkins University, Baltimore, Md.
 Blyth, Prof. John W., College Hill, Clinton, N.Y.
 Boas, Prof. George, Johns Hopkins University, Baltimore, Md.
 Bogoslovsky, Dr. Boris B., Cherry Lawn, Darien, Conn.
 Bonner, Prof. Hubert, Ironwood Junior College, Ironwood, Mich.
 Boodin, Prof. J. E., University of California at Los Angeles, Los Angeles, Calif.
 Boswell, Prof. Foster P., Hobart College, Geneva, N.Y.
 Boughton, Prof. Jesse Scott, Shurtleff College, Alton, Ill.
 Bouwsma, Dr. O. K., University of Nebraska, Lincoln, Neb.
 Bowers, Dr. David F., 43 Linden Lane, Princeton, N.J.
 Boynton, Prof. Richard W., University of Buffalo, Buffalo, N.Y.
 Bradish, Prof. Norman C., Northwestern University, Evanston, Ill.
 Bradshaw, Prof. M. J., Bangor Theological Seminary, Bangor, Me.
 Brameld, Prof. Theodore B., Adelphi College, Garden City, Long Island, N.Y.
 Brandt, Prof. Francis B., 131 Joralemon Ave., Brooklyn, N.Y.
 Brandt, Dr. Richard B., Swarthmore College, Swarthmore, Pa.
 Brautigam, Prof. Herman A., Colgate University, Hamilton, N.Y.
 Brett, Prof. G. S., University of Toronto, Toronto, Can.
 Brightman, Prof. Edgar S., Box 35, Newton Center, Mass.
 Brinton, Prof. Howard, Pendle Hill, Wallingford, Pa.
 Britan, Prof. Halbert H., Bates College, Lewiston, Me.
 Brogan, Prof. A. P., University of Texas, Austin, Tex.
 Bronstein, Dr. D. J., College of the City of New York, New York City.
 Brotherston, Prof. Bruce W., Tufts College, Medford, Mass.
 Brown, Prof. A. E., 1315 Cambridge Dr., Kalamazoo, Mich.
 Brown, Prof. H. C., Stanford University, Calif.
 Brown, Prof. Walter T., Principal, Victoria College, Toronto, Can.
 Brown, Prof. William Adams, Union Theological Seminary, New York City.
 Bryan, Pres. W. L., Indiana University, Bloomington, Ind.
 Buchanan, Prof. Scott M., St. Johns College, Annapolis, Md.
 Buckham, Prof. John Wright, Pacific School of Religion, Berkeley, Calif.
 Burnham, Mr. James, New York University, Washington Square, New York City.
 Burt, Prof. E. A., Cornell University, Ithaca, N.Y.
 Bush, Prof. Wendell T., Columbia University, New York City.
 Bussey, Prof. Gertrude C., Goucher College, Baltimore, Md.
 Butler, Pres. N. M., Columbia University, New York City.
 Butt, Dr. S. McClellan, 1117 Prince St., Alexandria, Va.
 Cairns, Dr. Dorion, 305 E. 88th St., New York City.
 Caldwell, Prof. M. A., University of Louisville, Louisville, Ky.
 Calhoun, Dr. Robert L., Yale University, New Haven, Conn.
 Campbell, Prof. Ivy G., Wells College, Aurora-on-Cayuga, N.Y.
 Carmichael, Prof. Peter A., Louisiana State University, Baton Rouge, La.
 Carmichael, Prof. R. D., University of Illinois, Urbana, Ill.
 Carnap, Prof. Rudolf, University of Chicago, Chicago, Ill.
 Case, Prof. Mary S., Wellesley College, Wellesley, Mass.
 Castell, Prof. Alburey, University of Minnesota, Minneapolis, Minn.
 Cattell, Dr. J. McKeen, Garrison-on-Hudson, N.Y.
 Chambers, Prof. L. P., Washington University, St. Louis, Mo.
 Chandler, Prof. Albert R., Ohio State University, Columbus, Ohio.
 Chanter, Prof. William G., Wesleyan University, Middletown, Conn.
 Chapman, Prof. Emanuel, Fordham University, New York City.
 Chapman, Prof. Harmon M., New York University, University Heights, New York City.

Chidsey, Prof. Harold R., Lafayette College, Easton, Pa.
Christ, Dr. Paul S., Liberty High School, Bethlehem, Pa.
Church, Prof. Ralph W., Cornell University, Ithaca, N.Y.
Clark, Dr. Gordon H., Wheaton College, Wheaton, Ill.
Clark, Mr. John, Earlham College, Richmond, Ind.
Clark, Prof. Mary E., Smith College, Northampton, Mass.
Clarke, Prof. Francis P., University of Pennsylvania, Philadelphia, Pa.
Cobb, Dr. Henry, Carlton College, Northfield, Minn.
Coffin, Prof. J. Herschell, Whittier College, Whittier, Calif.
Cohen, Dr. Felix S., Office of Solicitor, Dept. of Interior, Washington, D.C.
Cohen, Prof. Joseph W., University of Colorado, Boulder, Colo.
Cohen, Prof. Morris R., College of the City of New York, New York City.
Conger, Prof. G. P., University of Minnesota, Minneapolis, Minn.
Coolidge, Dean Mary Lowell, Wellesley College, Wellesley, Mass.
Cory, Prof. C.E., Washington University, St. Louis, Mo.
Coss, Prof. John J., Columbia University, New York City.
Costello, Prof. H. T., Trinity College, Hartford, Conn.
Cowling, Pres. D. J., Carleton College, Northfield, Minn.
Cox, Dr. George Clarke, 70 Pine St., New York City.
Craig, Dr. Wallace, 280 Hamilton St., Albany, N.Y.
Crawford, Prof. J. F., Beloit College, Beloit, Wis.
Crawford, Prof. Lucy S., Sweet Briar College, Sweet Briar, Va.
Creed, Miss Isabel, University of California, Los Angeles, Calif.
Cresswell, Prof. John R., West Virginia University, Morgantown, W.Va.
Crissman, Dr. Paul, Northwestern University, Evanston, Ill.
Crooks, Prof. Ezra B., University of Delaware, Newark, Del.
Crowley, Prof. W. A., University of Cincinnati, Cincinnati, Ohio.
Cunningham, Prof. G. Watts, Cornell University, Ithaca, N.Y.
Curry, Prof. Haskell B., Pennsylvania State College, State College, Pa.
Cutler, Prof. Anna A., 407 Whitney Ave., New Haven, Conn.

Dakin, Dr. Arthur Hazard, Darley-in-the-Dale, Amherst, Mass.
Daniels, Dean Arthur H., University of Illinois, Urbana, Ill.
Davenport, Prof. Charles K., Box 1233, University of Virginia, University, Va.
Davidson, Prof. Robert F., Hiram College, Hiram, Ohio.
Dearborn, Dr. G. V. N., U. S. Veterans' Hospital Number 81, New York City.
De Boer, Prof. C., University of Arkansas, Fayetteville, Ark.
Deglman, Prof. G. A., Creighton University, Omaha, Neb.
De Largy, Dr. P. L., University of Illinois, Urbana, Ill.
Demos, Prof. Raphael, Harvard University, Cambridge, Mass.
Dennes, Prof. W. R., University of California, Berkeley, Calif.
Dewey, Prof. John, 320 E. 72nd St., New York City.
DeWolf, Prof. L. Harold, Boston University, Boston, Mass.
Dey, Prof. Margaret R., Vassar College, Poughkeepsie, N.Y.
Dickinson, Prof. F. W., University of Denver, Denver, Colo.
Diesendruck, Prof. Z., Hebrew Union College, Cincinnati, Ohio.
Diller, Prof. Elliott Van N., Mills College, Calif.
Dodd, Mrs. Edwin M., Jr., 999 Memorial Dr., Cambridge, Mass.
Dodge, Prof. Raymond, 333 Cedar St., New Haven, Conn.
Dolson, Dr. Grace N., St. Mary's Free Hospital for Children, Inc., 407 West 34th St., New York City.
von Domarus, Dr. Eilhard, Worcester State Hospital, Worcester, Mass.
Dommeyer, Dr. Frederick C., Brown University, Providence, R.I.
Dotterer, Prof. Ray H., Pennsylvania State College, State College, Pa.
Dubs, Prof. Homer H., Duke University, Durham, N.C.
Ducas, Prof. C. J., Brown University, Providence, R.I.
Dunham, Prof. Barrows, 109 Bentley Rd., Cynwyd, Pa.
Dunham, Dr. James H., Temple University, Philadelphia, Pa.
Duvall, Prof. T. G., Ohio Wesleyan University, Delaware, Ohio.

Dwight, Prof. Charles A. S., Box 216, Oak Bluffs, Mass.
 Dykhuizen, Prof. George, University of Vermont, Burlington, Vt.

Eaton, Prof. Howard O., University of Oklahoma, Norman, Okla.
 Eckhardt, Prof. L. R., DePauw University, Greencastle, Ind.
 Edel, Mr. Abraham, College of the City of New York, New York City.
 Edgar, Dr. W. J. B., 1227 Madison Ave., New York City.
 Edman, Prof. Irwin, Columbia University, New York City.
 Elkus, Dr. Savilla A., 88 Morningside Dr., New York City.
 Emch, Dr. Arnold F., 1210 Astor St., Chicago, Ill.
 Emery, Prof. Stephen A., University of North Carolina, Chapel Hill, N.C.
 Ericksen, Prof. E. E., University of Utah, Salt Lake City, Utah.
 Estall, Mr. Henry M., Queens Univ. Kingston, Ont., Can.
 Evans, Prof. D. Luther, University of Wisconsin, Madison, Wis.
 Evans, Dr. W. V., Carlton College, Northfield, Minn.
 Everett, Prof. Millard S., University of Minnesota, Minneapolis, Minn.

Farber, Prof. Marvin, University of Buffalo, Buffalo, N.Y.
 Farley, Prof. J. H., Lawrence College, Appleton, Wis.
 Feigl, Prof. Herbert, University of Iowa, Iowa City, Iowa.
 Fenlon, Prof. Edward J., Brooklyn College, Brooklyn, N.Y.
 Ferm, Prof. Vergilius, College of Wooster, Wooster, Ohio.
 Fisch, Prof. M. H., Western Reserve University, Cleveland, Ohio.
 Fisher, Dr. Donald Warren, 39 East 39 St., New York, N.Y.
 Fitch, Dr. Frederic B., 93 Linden St., New Haven, Conn.
 Fitch, Prof. Robert E., Pacific University, Forest Grove, Ore.
 Fite, Prof. Warner, Hopewell, N.J.
 Flewelling, Prof. Ralph T., University of Southern California, Los Angeles, Calif.
 Flory, Dr. Paul M., Olivet College, Olivet, Mich.
 Fort, Prof. William Edwards, Jr., Winthrop College, Rock Hill, S.C.
 Fries, Dr. Horace S., University of Wisconsin, Madison, Wis.
 Friess, Prof. Horace L., Columbia University, New York City.
 Frye, Prof. A. Myrton, Dartmouth College, Hanover, N.H.
 Fuller, Prof. B. A. G., University of Southern California, Los Angeles, Calif.
 Fulton, Dr. James S., McGill University, Montreal, Can.

Gabbert, Prof. M. R., University of Pittsburgh, Pittsburgh, Pa.
 Gamersfelder, Prof. W. S., Ohio University, Athens, Ohio.
 Garnett, Prof. A. C., University of Wisconsin, Madison, Wis.
 Garnett, Prof. Christopher Browne, Jr., The George Washington University, Washington, D.C.
 Garvin, Dr. Lucius, Oberlin College, Oberlin, Ohio.
 Geiger, Prof. G. R., Antioch College, Yellow Springs, Ohio.
 Gentry, Prof. George, University of Texas, Austin, Tex.
 Geyer, Prof. Denton L., 6800 Stewart Ave., Chicago, Ill.
 Gifford, Prof. A. R., University of Vermont, Burlington, Vt.
 Gilbert, Dr. Katherine E., 516 Carolina Circle, Durham, N.C.
 Gillett, Prof. A. L., 16 Marshall St., Hartford, Conn.
 Ginzburg, Dr. Benjamin, 40 Independence St., Washington, D.C.
 Girvety, Dr. Harry, Santa Barbara State College, Santa Barbara, Calif.
 Goertz, Dean P. S., Bethel College, Newton, Kan.
 Gordon, Dr. Kate, 10431 Tennessee Ave., Los Angeles, Calif.
 Gotshalk, Prof. D. W., University of Illinois, Urbana, Ill.
 Goudge, Dr. Thomas A., Queen's University, Kingston, Ont., Canada.
 Gray-Smith, Prof. Rowland, Emerson College, Boston, Mass.
 Greene, Prof. Theodore M., Princeton University, Princeton, N.J.
 Griffith, Prof. C. R., University of Illinois, Urbana, Ill.
 Guthrie, Prof. E. R., University of Washington, Seattle, Wash.
 Gutmann, Prof. James, Columbia University, New York City.

- Hack, Prof. R. K., University of Cincinnati, Cincinnati, Ohio.
 Hahn, Dr. Lewis E., University of Missouri, Columbia, Mo.
 Hall, Prof. Everett W., Stanford University, Calif.
 Hammond, Dr. Lewis M., University of Virginia, University, Va.
 Hammond, Prof. W. A., Cosmos Club, 815 Connecticut Ave., Washington, D.C.
 Harap, Dr. Louis, Robbins Library, Emerson Hall, Cambridge, Mass.
 Harkness, Prof. Georgia E., Mt. Holyoke College, South Hadley, Mass.
 Harris, Prof. Marjorie S., Randolph-Macon Woman's College, Lynchburg, Va.
 Harris, Dean M. LaFayette, Samuel Houston College, Austin, Tex.
 Hartman, Prof. H. G., University of Cincinnati, Cincinnati, Ohio.
 Hartshorne, Prof. Charles, University of Chicago, Chicago, Ill.
 Haserot, Dr. Francis S., William and Mary College, Williamsburg, Va.
 Hausheer, Prof. Herman, Lamoni, Iowa.
 Hawes, Prof. R. P., Goucher College, Baltimore, Md.
 Hazelton, Dr. Roger, Olivet College, Olivet, Mich.
 Headley, Prof. Leal A., Carleton College, Northfield, Minn.
 Heath, Prof. Louise R., Hood College, Frederick, Md.
 Hefelbower, Prof. Samuel G., Wagner College, Staten Island, N.Y.
 Helsel, Dr. Paul R., Seattle Pacific College, Seattle, Wash.
 Hendel, Prof. Charles W., McGill University, Montreal, Can.
 Henderson, Prof. Edgar, Box 303, Meredith College, Raleigh, N.C.
 Henderson, Prof. Ernest N., Adelphi College, Garden City, N.Y.
 Henke, Prof. Frederick G., Allegheny College, Meadville, Pa.
 Henle, Prof. Paul, Smith College, Northampton, Mass.
 Hickson, Dr. J. W. A., 3428 Ontario Ave., Montreal, Can.
 Hildebrand, Prof. Carroll DeWitt, DePauw University, Greencastle, Ind.
 Hill, Dr. A. R., 618 Pioneer Trust Bldg, Kansas City, Mo.
 Hillman, Dr. Owen N., Princeton University, Princeton, N.J.
 Hinman, Prof. E. L., University of Nebraska, Lincoln, Neb.
 Hite, Prof. L. F., 42 Arlington St., Cambridge, Mass.
 Hocking, Dr. Richard, Williams College, Williamstown, Mass.
 Hocking, Prof. W. E., Harvard University, Cambridge, Mass.
 Hoekstra, Dr. Raymond, University of Michigan, Ann Arbor, Mich.
 Hoffman, Prof. Rolf, 1535 Monaco Dr., Pacific Palisades, Los Angeles, Calif.
 Holcomb, Prof. Louise, Wilson College, Chambersburg, Pa.
 Hollands, Prof. E. H., University of Kansas, Lawrence, Kan.
 Holmes, Dr. Roger W., Mount Holyoke College, South Hadley, Mass.
 Holtzclaw, Prof. B. C., University of Richmond, Richmond, Va.
 Hook, Prof. Sidney, New York University, Washington Square, New York City.
 Hope, Prof. Richard, University of Pittsburgh, Pittsburgh, Pa.
 Horne, Prof. H. H., New York University, New York City.
 Houf, Prof. H. T., Ohio University, Athens, Ohio.
 Howard, Prof. D. T., Northwestern University, Evanston, Ill.
 Hudson, Prof. J. W., University of Missouri, Columbia, Mo.
 Hughes, Prof. Percy, Lehigh University, Bethlehem, Pa.
 Husik, Prof. Isaac, University of Pennsylvania, Philadelphia, Pa.
 Iredell, Prof. Francis R., Pomona College, Claremont, Calif.
 Irving, Prof. John Allan, Princeton University, Princeton, N.J.
 Jaffe, Dr. Haym, 6244 North Broad St., Philadelphia, Pa.
 Jefferson, Prof. Howard B., Colgate University, Hamilton, N.Y.
 Jellema, Prof. Harry, University of Indiana, Bloomington, Ind.
 Johnson, Dr. Allison Hartz, University of Western Ontario, London, Can.
 Johnson, Prof. George, Lincoln University, Chester County, Pa.
 Johnson, Prof. Paul E., Morningside College, Sioux City, Iowa.
 Johnson, Prof. R. B. C., Kittery Point, Me.

- Jones, Prof. A. H., University of Rochester, Rochester, N.Y.
 Jones, Prof. Rufus M., Haverford College, Haverford, Pa.
 Jordan, Prof. E., Butler University, Indianapolis, Ind.
 Jordan, Prof. H. P., Carleton College, Northfield, Minn.
 Jordan, Prof. Philip D., Long Island University, 300 Pearl St., Brooklyn, N.Y.
- Kagey, Dr. Rudolph, New York University, Washington Square, New York City.
- Kallen, Prof. Horace, 66 W. 12th St., New York City.
- Kantonen, Prof. T. A., Wittenberg College, Springfield, Ohio.
- Kantor, Prof. J. R., Indiana University, Bloomington, Ind.
- Kattsoff, Dr. Louis O., University of North Carolina, Chapel Hill, N.C.
- Kearney, Prof. Chester M., Aurora College, Aurora, Ill.
- Kellogg, Prof. Edwin H., Skidmore College, Saratoga Springs, N.Y.
- Kelly, Prof. Thomas R., Haverford College, Haverford, Pa.
- Kemmerer, Dr. Mabel C., State Laboratory, Old Capitol, Jackson, Miss.
- Kennedy, Prof. Gail, Amherst College, Amherst, Mass.
- Kerby-Miller, Mr. S., Reed College, Portland, Ore.
- Keyser, Prof. Cassius J., Columbia University, New York City.
- King, Dr. Albion R., Cornell College, Mount Vernon, Iowa.
- Kirn, Dean G. J., North Central College, Naperville, Ill.
- Klausner, Prof. Neal W., University of Redlands, Redlands, Calif.
- Knight, Prof. Edward C., 5546 Page Blvd., St. Louis, Mo.
- Knudson, Prof. Albert C., 72 Mt. Vernon St., Boston, Mass.
- Koch, Dr. G. Adolph, Long Island University, 300 Pearl St., Brooklyn, N.Y.
- Konvitz, Dr. Milton R., 345 Belmont Ave., Newark, N.J.
- Kotkov, Dr. Benjamin, 246 Hyde Park Ave., Jamaica Plain, Mass.
- Kraushaar, Prof. Otto F., Smith College, Northampton, Mass.
- Kretschmann, Prof. Philip M., 1049 E. 31 St., Brooklyn, N.Y.
- Krikorian, Prof. Yervant H., College of the City of New York, New York City.
- Krug, Prof. C. A., Mount Allison University, Sackville, N.B., Can.
- Krusé, Prof. Cornelius, Wesleyan University, Middletown, Conn.
- Kubitz, Dr. Oscar, University of Illinois, Urbana, Ill.
- Lafferty, Prof. T. T., Lehigh University, Bethlehem, Pa.
- Laflaur, Dr. Laurence J., 25 Tennis Court, Brooklyn, N.Y.
- de Laguna, Prof. Grace A., Bryn Mawr College, Bryn Mawr, Pa.
- Laine, Dr. Elizabeth, 1060 Park Ave., New York City.
- Lamont, Dr. Corliss, 450 Riverside Dr., New York City.
- Lamprecht, Prof. Sterling P., Amherst College, Amherst, Mass.
- Lane, Prof. W. B., University of Toronto, Toronto, Can.
- Langer, Dr. Susanne K., Radcliffe College, Cambridge, Mass.
- Langford, Prof. Cooper H., University of Michigan, Ann Arbor, Mich.
- Lanz, Prof. H. C., Stanford University, Calif.
- Larrabee, Prof. Harold A., Union College, Schenectady, N.Y.
- Lavelly, Prof. Horace T., Allegheny College, Meadville, Pa.
- Lawton, Dr. George, 35 West 82nd St., New York City.
- Lazerowitz, Dr. Morris, c/o Harvard Graduate School, Cambridge, Mass.
- Leary, Prof. D. B., University of Buffalo, Buffalo, N.Y.
- Leavenworth, Dr. Isabel F., 320 East 72nd St., New York City.
- LeBoutillier, Prof. Cornelia G., Occidental College, Los Angeles, Calif.
- Leckie, Prof. G. G., Elmira College, Elmira, N.Y.
- Lee, Dr. Otis Hamilton, Pomona College, Claremont, Calif.
- Leidecker, Mr. Kurt F., 2517 15th St., New York City.
- Leighton, Prof. J. A., Ohio State University, Columbus, Ohio.
- Lenzen, Prof. V. F., University of California, Berkeley, Calif.
- Leonard, Prof. Henry S., Duke University, Durham, N.C.
- Lepley, Dr. Ray, Bradley Polytechnic Institute, Peoria, Ill.
- Levinson, Prof. Ronald B., University of Maine, Orono, Me.

- Lewis, Prof. Clarence I., Harvard University, Cambridge, Mass.
 Lewis, Dr. Leicester C., 7737 St. Martin's Lane, Chestnut Hill, Pa.
 Leys, Dr. W. A. R., Central Y.M.C.A. College, Chicago, Ill.
 Liddell, Prof. A. Forbes, Florida State College for Women, Tallahassee, Fla.
 Lindley, Pres. E. H., University of Kansas, Lawrence, Kan.
 Litman, Dr. Alexander, 280 Port Washington Ave., New York City.
 Lodge, Prof. R. C., University of Manitoba, Winnipeg, Can.
 Loewenberg, Prof. J., University of California, Berkeley, Calif.
 Long, Prof. W. H., University of Southern California, Los Angeles, Calif.
 Lough, Prof. J. E., 66 Fifth Ave., New York City.
 Lovejoy, Prof. A. O., 95 Prescott St. Cambridge, Mass.
 Lowe, Dr. Victor, 40 Shepard St., Cambridge, Mass.
 Lyman, Prof. Eugene W., Union Theological Seminary, New York City.
 Lynch, Dr. J. A., Rice Institute, Houston, Tex.
- McClure, Dean M. T., University of Illinois, Urbana, Ill.
 McCracken, Miss Anna, University of Kansas, Lawrence, Kan.
 MacDougall, Prof. R. M., 228 Midland Ave., Montclair, N.J.
 McGill, Dr. V. J., Hunter College, New York City.
 McGilvary, Prof. E. B., University of Wisconsin, Madison, Wis.
 McIntire, Prof. Walter O., Wheaton College, Norton, Mass.
 McLarty, Dr. Furman Gordon, Hillsboro, N.C.
 McWilliams, Prof. J. A., St. Louis University, St. Louis, Mo.
 Macintosh, Prof. Douglas C., Yale University, New Haven, Conn.
 Mackay, Prof. D. S., University of California, Berkeley, Calif.
 McKeon, Prof. Richard, University of Chicago, Chicago, Ill.
 MacLennan, Prof. Roderick, McGill University, Montreal, Can.
 MacMillan, Dr. D. F., Board of Education, Chicago, Ill.
 McPherson, Dr. Nenien C., Southern Methodist University, Dallas, Tex.
 Mahan, Prof. W. B., University of Arkansas, Fayetteville, Ark.
 Mandelbaum, Dr. Maurice H., Swarthmore College, Swarthmore, Pa.
 Manry, Prof. James C., Allahabad Christian College, Allahabad, India.
 Marhenke, Dr. Paul, University of California, Berkeley, Calif.
 Marsh, Prof. H. D., College of the City of New York, New York City.
 Marshall, Prof. John S., Albion College, Albion, Mich.
 Marti, Prof. Fritz, University of Maryland, College Park, Md.
 Martin, Mr. Everett D., Dept. of Social Philosophy, Claremont College, Claremont, Calif.
 Martin, Prof. Herbert, University of Iowa, Iowa City, Iowa.
 Martin, Dr. William Oliver, Ohio University, Athens, Ohio.
 Marvin, Prof. W. T., Rutgers University, New Brunswick, N.J.
 Mason, Prof. M. Phillips, Bowdoin College, Brunswick, Me.
 Mauzey, Prof. Jesse V., Skidmore College, Saratoga Springs, N.Y.
 Means, Dr. Blanchard W., Trinity College, Hartford, Conn.
 Meier, Dr. Frederick W., P.O. Box 642, Louisiana State University, Baton Rouge, La.
 Meiklejohn, Prof. Alexander, 1525 La Loma Ave., Berkeley, Calif.
 Meiklejohn, Dr. Donald, Dartmouth College, Hanover, N.H.
 Meland, Prof. B. E., Central College, Fayette, Mo.
 Melrose, Prof. J. A., James Millikin University, Decatur, Ill.
 Melvin, Prof. Georgiana, Mills College, Calif.
 Michel, Prof. Virgil, St. John's University, Collegeville, Minn.
 Miller, Prof. Hugh, 217 Burlingame Ave., Los Angeles, Calif.
 Miller, Prof. James W., College of William and Mary, Williamsburg, Va.
 Miller, Prof. John W., Williams College, Williamstown, Mass.
 Mitchell, Prof. E. T., University of Texas, Austin, Tex.
 Mitrany, Prof. David, Institute for Advanced Study, Princeton, N.J.
 Montague, Prof. W. P., Barnard College, Columbia University, New York City.
 Moore, Prof. Charles A., University of Hawaii, Honolulu, Hawaii.

- Moore, Prof. Dale H., Lafayette College, Easton, Pa.
 Moore, Dr. E. C., University of California at Los Angeles, Los Angeles, Calif.
 Moore, Prof. Jared S., Western Reserve University, Cleveland, Ohio.
 Moore, Dr. Meritt H., Knox College, Galesburg, Ill.
 Moore, Dr. Willis, University of Missouri, Columbia, Mo.
 More, Dean Louis T., University of Cincinnati, Cincinnati, Ohio.
 Morgan, Dr. Barbara S., 840 Park Ave., New York City.
 Morgan, Prof. George Allen, Jr., Duke University, Durham, N.C.
 Morgan, Prof. W. J., Washburn College, Topeka, Kan.
 Morgan, Pres. William S., Pacific Unitarian School for the Ministry, Berkeley, Calif.
 Morris, Dr. Bertram, Northwestern University, Evanston, Ill.
 Morris, Prof. Charles W., University of Chicago, Chicago, Ill.
 Morris, Prof. Frank E., Connecticut College, New London, Conn.
 Morrow, Prof. Glenn R., University of Illinois, Urbana, Ill.
 Muelder, Prof. Walter G., Berea College Station, Ky.
 Mueller, Prof. Gustav, University of Oklahoma, Norman, Okla.
 Mulherin, Father W. A., Spring Hill College, Mobile, Ala.
 Munro, Prof. Thomas, Museum of Art, Cleveland, Ohio.
 Murphy, Prof. Arthur E., Brown University, Providence, R.I.
 Myers, Prof. Orvil F., Los Angeles Junior College, Los Angeles, Calif.
- Nagel, Prof. Ernest, Columbia University, New York City.
 Nahm, Prof. Milton C., Bryn Mawr College, Bryn Mawr, Pa.
 Nason, Mr. John W., Swarthmore College, Swarthmore, Pa.
 Nelson, Prof. Everett J., University of Washington, Seattle, Wash.
 Nelson, Prof. R. W., Phillips University, Enid, Okla.
 Newhall, Dr. Jannette E., 48 Braeland Ave., Newton Center, Mass.
 Newlin, Prof. W. J., Amherst College, Amherst, Mass.
 Nicholson, Prof. J. A., University of Illinois, Urbana, Ill.
 Nicol, Prof. Carl C. W., Oberlin College, Oberlin, Ohio.
 Nilson, Dr. Sven, 1015 Fourteenth Ave. S.E., Minneapolis, Minn.
 Norris, Prof. Louis William, 49 Beech St., Berea, Ohio.
 Norris, Prof. O. O., Ypsilanti State Normal College, Ypsilanti, Mich.
 Northrop, Prof. F. S. C., 1891 Yale Station, New Haven, Conn.
- Oliver, Dr. W. Donald, University of Minnesota, Minneapolis, Minn.
 Osborne, Prof. C. P., University of Kansas, Lawrence, Kan.
 Otto, Prof. M. C., University of Wisconsin, Madison, Wis.
 Overstreet, Prof. Harry A., College of the City of New York, New York City.
- Pace, Prof. E. A., Catholic University of America, Washington, D.C.
 Pape, Dr. L. M., University of Chicago, Chicago, Ill.
 Parker, Prof. D. H., University of Michigan, Ann Harbor, Mich.
 Parkhurst, Prof. Helen H., Barnard College, New York City.
 Patrick, Prof. G. T. W., 1325 College Ave., Palo Alto, Calif.
 Patterson, Prof. Charles H., University of Nebraska, Lincoln, Neb.
 Patterson, Dean Herbert, Oklahoma A. & M. College, Stillwater, Okla.
 Patterson, Dr. Robert Leet, The Warrington, North Charles St., Baltimore, Md.
 Payne, Pres. Bruce R., George Peabody College for Teachers, Nashville, Tenn.
 Payne, Prof. Wilfred, Municipal University of Omaha, Omaha, Neb.
 Pell, Prof. Orlie A. H., 235 East 22nd St., New York City.
 Penrose, Prof. Stephen B. L., Jr., Rockford College, Rockford, Ill.
 Pepper, Prof. S. C., University of California, Berkeley, Calif.
 Perry, Prof. Charles M., University of Oklahoma, Norman, Okla.
 Perry, Prof. Charner M., University of Chicago, Chicago, Ill.

- Perry, Prof. Ralph B., Harvard University, Cambridge, Mass.
Peterson, Dr. Houston, 59 W. 12 St. New York City.
Pfeiffer, Prof. Frederick L., Dept. of German, University of Minnesota, Minneapolis, Minn.
Piatt, Prof. D. A., University of California at Los Angeles, Los Angeles, Calif.
Picard, Prof. Maurice, Dartmouth College, Hanover, N.H.
Piper, Prof. Raymond F., Syracuse University, Syracuse, N.Y.
Pollock, Prof. Robert, Fordham University, New York City.
Porteous, Mr. A. J. D., 16 Greenhill Place, Edinburgh, Scotland.
Pott, Pres. W. S. A., Elmira College, Elmira, N.Y.
Powell, Prof. Elmer E., Miami University, Oxford, Ohio.
Prall, Prof. D. W., Leverett House E-23, Harvard University, Cambridge, Mass.
Pratt, Prof. J. B., Williams College, Williamstown, Mass.
Pray, Dr. Ruth Wallis, Oklahoma College for Women, Chickasha, Okla.
Proctor, Prof. Thomas Hayes, Wellesley College, Wellesley, Mass.
Pyle, Prof. C. B., Kansas State Teachers College, Pittsburg, Kan.
- Quine, Dr. Willard V. 61 Frost St. Cambridge, Mass.
- Rader, Prof. Melvin, University of Washington, Seattle, Wash.
Ramsperger, Dr. A. G., University of Wisconsin, Madison, Wis.
Randall, Prof. J. H. Jr., Columbia University, New York City.
Rathbun, Miss Constance, 15 Beaton St., Wellesley, Mass.
Ratner, Dr. Joseph, 513 E. 83rd St., New York City.
Raup, Prof. R. Bruce, Teachers College, Columbia University.
Rebec, Prof. George, University of Oregon, Eugene, Ore.
Regester, Prof. J. D., College of Puget Sound, Tacoma, Wash.
Reid, Prof. John R., Stanford University, Calif.
Reid, Dr. Stanley B., 1908 Delaware St., Berkeley, Calif.
Reinhardt, Prof. Kurt F., Stanford University, Palo Alto, Calif.
Reiser, Prof. Oliver L., University of Pittsburgh, Pittsburgh, Pa.
Reither, Dr. W. H., Ohio State University, Columbus, Ohio.
Reynolds, Prof. Paul A., Wesleyan University, Middletown, Conn.
Rice, Prof. Philip B., University of Cincinnati, Cincinnati, Ohio.
Rich, Dr. Gertrude V. B., Barnard College, New York City.
Rieber, Prof. C. H., University of California at Los Angeles, Los Angeles, Calif.
Riesen, Prof. E. R., University of Arizona, Tucson, Ariz.
Roback, Dr. A. A., 8 Prescott St., Cambridge, Mass.
Robbins, Mr. Reginald C., 390 Picacho Lane, Santa Barbara, Calif.
Roberts, Prof. W. H., 57 Bradley Point, West Haven, Conn.
Robins, Prof. Sidney S., St. Lawrence University, Canton, N.Y.
Robinson, Prof. D. S., Indiana University, Bloomington, Ind.
Robinson, Prof. E. A., State Teachers College, San Jose, Calif.
Robinson, Dr. Edward S., Kenyon College, Gambier, Ohio.
Robinson, Prof. Richard, Cornell University, Ithaca, N.Y.
Robson, Dr. J. W., Lawrence College, Appleton, Wis.
Roelofs, Prof. Howard D., University of Cincinnati, Cincinnati, Ohio.
Rohrbaugh, Prof. L. G., Dickinson College, Carlisle, Pa.
Rolliecki, Prof. John J., Catholic University, Washington, D.C.
Romanelli, Dr. Pasquale, Brooklyn College, Bedford Avenue and Avenue H, Brooklyn, N.Y.
Rosenstock-Huussy, Prof. Eugen, Dartmouth College, Hanover, N.H.
Rosinger, Dr. Kurt Edward, Woman's College, University of North Carolina, Greensboro, N.C.
Ruby, Dr. Lionel, 5059 Sheridan Rd., Chicago, Ill.
Rudd, Prof. Herbert F., University of New Hampshire, Durham, N.H.
Ruddick, Dr. C. T., College Hall, University of Pennsylvania, Philadelphia, Pa.

Ruja, Dr. Harry, 623 S. Hobart Ave., Los Angeles, Calif.
 Runkle, Prof. Erwin W., Pennsylvania State College, State College, Pa.
 Ryan, Most Reverend James H., 808 North 36th St., Omaha, Neb.

Sabine, Prof. George H., Cornell University, Ithaca, N.Y.
 Sabin-Smith, Prof. Ethel, Mills College, Calif.
 Sait, Prof. Una Bernard, Scripps College, Claremont, Calif.
 Sanborn, Prof. Herbert C., Vanderbilt University, Nashville, Tenn.
 Savery, Dr. Barnett, University of Washington, Seattle, Wash.
 Savery, Prof. William, University of Washington, Seattle, Wash.
 Savides, Prof. A. P., Russell Sage College, Troy, N.Y.
 Schaub, Prof. E. L., Northwestern University, Evanston, Ill.
 Schermerhorn, Dr. R. A., Clark University, Atlanta, Ga.
 Schilpp, Prof. P. A., Northwestern University, Evanston, Ill.
 Schmidt, Prof. Karl, Carleton College, Northfield, Minn.
 Schneider, Prof. Herbert W., Columbia University, New York City.
 Scon, Prof. Robert M., Princeton University, Princeton, N.J.
 Searles, Prof. H. L., University of Southern California, Los Angeles, Calif.
 Sears, Dr. Lawrence, 101 Montrose, Ave., Delaware, Ohio.
 Sellars, Prof. R. W., University of Michigan, Ann Arbor, Mich.
 Sellen, Prof. Arthur G., Washburn College, Topeka, Kan.
 Selsam, Dr. Howard, Brooklyn College, Brooklyn, N.Y.
 Shafer, Prof. Robert, Graduate School, University of Cincinnati, Cincinnati, Ohio.
 Sharp, Prof. Frank C., University of Wisconsin, Madison, Wis.
 Sharrard, Prof. J. A., University of Saskatchewan, Saskatoon, Sask., Can.
 Shaw, Prof. C. G., New York University, Washington Square, New York City.
 Shaw, Dr. Mary, University of Minnesota, Minneapolis, Minn.
 Shearer, Prof. Edna A., Smith College, Northampton, Mass.
 Sheffer, Prof. H. M., Emerson Hall, Harvard University, Cambridge, Mass.
 Sheldon, Prof. W. H., Yale University, New Haven, Conn.
 Sheriff, Prof. Wilbur S., Scranton-Keystone Junior College, La Plume, Pa.
 Sherman, Prof. C. L., Willamette University, Salem, Ore.
 Shimer, Dr. Wm. A., 145 W. 55th St., New York City.
 Singer, Prof. Edgar A., University of Pennsylvania, Philadelphia, Pa.
 Sisson, Prof. Edward O., Reed College, Portland, Ore.
 Slonimsky, Dr. Henry, 40 W. 68th St., New York City.
 Smart, Prof. Harold R., Cornell University, Ithaca, N.Y.
 Smith, Prof. Henry B., Box 23, College Hall, University of Pennsylvania, Philadelphia, Pa.
 Smith, Mr. H. Jeffery, University of Southern California, Los Angeles, Calif.
 Smith, Prof. T. V., University of Chicago, Chicago, Ill.
 Snow, Dr. Adolph J., 1320 Ashland Ave., Wilmette, Ill.
 Soares, Prof. Theodore G., California Institute of Technology, Pasadena, Calif.
 Somerville, Mr. John, Columbia University, New York City.
 Spaulding, Prof. E. G., Princeton University, Princeton, N.J.
 Speight, Dean H. E. B., Swarthmore College, Swarthmore, Pa.
 Spencer, Prof. Margaret N., Miami University, Oxford, Ohio.
 Spencer, Prof. W. Wylie, Miami University, Oxford, Ohio.
 Sprague, Prof. Paul W., Wheaton College, Norton, Mass.
 Springer, Prof. F. E., College of Idaho, Caldwell, Idaho.
 Squires, Prof. W. H., Hamilton College, Clinton, N.Y.
 Stace, Prof. Walter T., Princeton University, Princeton, N.J.
 Stallknecht, Prof. Newton P., Bowdoin College, Brunswick, Me.
 Stalnaker, Prof. Luther W., Drake University, Des Moines, Iowa.
 Starbuck, Prof. E. D., University of Southern California, Los Angeles, Calif.
 Steere, Prof. Douglas V., Haverford College, Haverford, Pa.

- Stephens, Prof. I. K., Southern Methodist University, Dallas, Tex.
Stephens, Prof. Robert G., Culver Military Academy, Culver, Ind.
Stokes, Dr. Ella H., Penn College, Oskaloosa, Iowa.
Stone, Prof. Wendell C., Rollins College, Winter Park, Fla.
Stoops, Prof. J. D., Grinnell College, Grinnell, Iowa.
Storer, Mr. Morris B., The Kennedy-Warren, Washington, D.C.
Storrs, Dr. Margaret, 66 Massasoit St., Northampton, Mass.
Strong, Prof. C. A., Fiesole, Florence, Italy. *Life Member*.
Strong, Dr. Edward W., 803 Regal Rd., Berkeley, Calif.
Stuart, Prof. H. W., Stanford University, Calif.
Swabey, Prof. Marie Collins, New York University, Washington Square, New York City.
Swabey, Prof. W. Curtis, New York University, University Heights, New York City.
Swenson, Prof. David F., University of Minnesota, Minneapolis, Minn.
Swift, Prof. R. F., Rockford College, Rockford, Ill.
Tausch, Dr. C. F., 5738 South Bldg., U. S. Dept. of Agriculture, Washington, D.C.
Talbert, Prof. Ernest L., University of Cincinnati, Cincinnati, Ohio.
Talbot, Prof. Ellen B., Mt. Holyoke College, South Hadley, Mass.
Tapper, Prof. Bonno, University of Iowa, Iowa City, Iowa.
Tawney, Prof. Guy A., University of Illinois, Urbana, Ill.
Taylor, Prof. W. S., Pierce Hall, Northampton, Mass.
Ten Hoer, Prof. Martin, Tulane University, New Orleans, La.
Terrell, Prof. Granville, Louisa, Va.
Thalheimer, Dr. Ross, Johns Hopkins University, Baltimore, Md.
Thomas, Prof. George F., Dartmouth College, Hanover, N.H.
Thomas, Dr. Wendell M., 45 Teimann Pl., New York City.
Thompson, Prof. C. G., Lincoln Memorial University, Harrogate, Tenn.
Thompson, Prof. R. C., University of Nevada, Reno, Nev.
Thompson, Prof. Samuel, Monmouth College, Monmouth, Ill.
Thomson, Prof. M. K., 11 S. Summit St., Ypsilanti, Mich.
Thorndike, Prof. E. L., Columbia University, New York City.
Titus, Prof. Harold H., Denison University, Granville, Ohio.
Toll, Prof. C. H., Amherst College, Amherst, Mass.
Tonness, Dr. Alfred, 1725 C St., Pullman, Wash.
Tower, Prof. C. V., Ursinus College, Collegeville, Pa.
Townsend, Prof. H. G., University of Oregon, Eugene, Ore.
Trap, Prof. William M., Wayne University, Detroit, Mich.
Trueblood, Prof. D. Elton, Stanford University, Calif.
Tsanoff, Prof. R. A., The Rice Institute, Houston, Tex.
Tufts, Prof. James H., 2631 Durant Ave., Berkeley, Calif.
Tufts, Dr. Matilde Castro, 2631 Durant Ave., Berkeley, Calif.
Turner, Prof. John Pickett, Brooklyn College, Brooklyn, N.Y.
Tuttle, Prof. John R., Elmira College, Elmira, N.Y.
Urban, Prof. Wilbur M., Yale University, New Haven, Conn.
Ushenko, Prof. A. P., Princeton University, Princeton, N.J.
Vander Lugt, Prof. G. T., Carroll College, Waukesha, Wis.
Van de Walle, Prof. William E., University of Rochester, Rochester, N.Y.
Van Riper, Dr. Benjamin W., 6137 Glenwood Ave., Chicago, Ill.
Veazie, Prof. Walter B., University of Colorado, Boulder, Colo.
Venable, Prof. Vernon, Vassar College, Poughkeepsie, N.Y.
Verda, Sister Mary, St. Mary's College, Notre Dame, Ind.
Vibbert, Prof. Charles B., University of Michigan, Ann Arbor, Mich.
Vivas, Mr. Eliseo, University of Wisconsin, Madison, Wis.
Vlastos, Prof. Gregory, Queen's University, Kingston, Ont., Can.
Walcott, Prof. G. D., Long Island University, Brooklyn, N.Y.
Walsh, Dr. Dorothy, Bryn Mawr College, Bryn Mawr, Pa.

- Warbeke, Prof. John M., Mt. Holyoke College, South Hadley, Mass.
 Ward, Prof. Leo R., Notre Dame University, Notre Dame, Ind.
 Ward, Prof. Paul W., Syracuse University, Syracuse, N.Y.
 Warren, Dean William M., Boston University, Boston, Mass.
 Warren, Prof. W. P., Furman University, Greenville, S.C.
 Waters, Dr. Bruce, Ohio State University, Columbus, Ohio.
 Watson, Prof. A. C., Marietta College, Marietta, Ohio.
 Weber, Dr. Alden, Cornell University, Ithaca, N.Y.
 Weinberg, Dr. Julius, Cornell University, Ithaca, N.Y.
 Weiss, Dr. Charles, 95 Boerum St., Brooklyn, N.Y.
 Weiss, Prof. Paul, Bryn Mawr College, Bryn Mawr, Pa.
 Welch, Dr. Livingston, 420 E. 58th St. New York City.
 Wells, Prof. Wesley R., Moravia, N.Y.
 Werkmeister, Prof. W. H., University of Nebraska, Lincoln, Neb.
 Wertheimer, Prof. Max, 12 The Circle, New Rochelle, N.Y.
 Weyer, Dean Edward M., Washington and Jefferson College, Washington, Pa.
 Wheelwright, Prof. Philip E., Dartmouth College, Hanover, N.H.
 Whitchurch, Prof. Irl Goldwin, Garrett Biblical Institute, Evanston, Ill.
 Whithead, Prof. Alfred N., Harvard University, Cambridge, Mass.
 Whitney, Prof. G. W. T., Princeton University, Princeton, N.J.
 Widgery, Prof. Alban G., Duke University, Durham, N.C.
 Wieman, Prof. Henry N., University of Chicago, Chicago, Ill.
 Wiener, Dr. Philip P., C.C.N.Y.; Convent Ave. & W. 138 St. New York City.
 Wild, Prof. John, Harvard University, Cambridge, Mass.
 Will, Dr. Frederick L., University of Illinois, Urbana, Ill.
 Williams, Prof. D. C., University of California at Los Angeles, Los Angeles, Calif.
 Williams, Prof. Gardner, University of Toledo, Toledo, Ohio.
 Williams, Dr. Milton, Syracuse University, Syracuse, N.Y.
 Williams, Prof. S. P., Lake Forest University, Lake Forest, Ill.
 Williamson, Prof. Mary, Hollins College, Hollins, Va.
 Wilson, Prof. George A., 3789 Menlo Ave., Los Angeles, Calif.
 Wilson, Dr. Hugh, 145 Hicks St., Brooklyn, N.Y.
 Wilson, Dr. Mabel Virginia, 205 Cayuga Heights Rd., Ithaca, N.Y.
 Wiltse, Dr. Charles M., 1900 F St. N.W., Washington, D.C.
 Winn, Dr. Ralph B., 54 Hamilton Terrace, New York City.
 Wolfson, Prof. Harry A., Harvard University, Cambridge, Mass.
 Wood, Prof. Ledger, Princeton University, Princeton, N.J.
 Woods, Mrs. James K., 29 Follen St., Cambridge, Mass.
 Woodbridge, Prof. F. J. E., Columbia University, New York City.
 Wright, Prof. H. W., University of Manitoba, Winnipeg, Man., Can.
 Wright, Prof. William K., Dartmouth College, Hanover, N.H.

ASSOCIATE MEMBERS

- Adlerblum, Mrs. Nima H., 99 Central Park W., New York City.
 Athearn, Mr. Clarence R., 2514 Bronx Parkway E., New York City.
 Bowden, Prof. Daniel Joseph, Elon College, N.C.
 Bradley, Mr. J. Harold, Box 1190, Tucson, Ariz.
 Bunyan, Mr. James T., Stanford University, Calif.
 Burgess, Mr. J. B., Los Angeles Junior College, Los Angeles, Calif.
 Douglass, Mr. Paul F., Green Mountain Junior College, Poultney, Vt.
 Dowdell, Dr. Victor L., Saco, Me.
 Druckmann, Mr. A., Pennsylvania State College, State College, Pa.
 Feibleman, Mr. James K., 305 Baronne St., New Orleans, La.
 Feuer, Dr. Lewis S., 2132 Daly Ave., Bronx, N.Y.

Gildemeister, Prof. Theda, 311 W. Tremont St., Hillsboro, Ill.
Gittler, Mr. Joseph B., University of Georgia, Athens, Ga.
Gruen, Mr. William, 540 West 123rd St., New York City.

Hafkesbrink, Dr. Hanna, Connecticut College, New London, Conn.
Hattersley, Mr. L. W., 1038 Elizabeth St., Pasadena, Calif.
Havice, Prof. Charles William, Northeastern University, Boston, Mass.
Hess, Mr. Sterling E., Scranton-Keystone Junior College, La Plume, Pa.
Hughes, Dr. W. Hardin, Pasadena Junior College, Pasadena, Calif.

Kamiat, Mr. Arnold H., 1136 Sterling Pl., Brooklyn, N.Y.

Lazar, Mr. Nathan, 915 Washington Ave., Brooklyn, N.Y.
Leavens, Dr. R. F., 1900 Yosemite Rd., Berkeley, Calif.

McConnell, Bishop Francis J., 150 Fifth Ave., New York City.
Mason, Dr. Gabriel R., Abraham Lincoln High School, Brooklyn, N.Y.
Maxwell, Dr. William, State Teachers College, Santa Barbara, Calif.

Nickels, Mr. Horace J., George Williams College, 5315 Drexel Ave., Chicago, Ill.

Pettegrove, Mr. James P., 75 Grove St., Montclair, N.J.

Reeder, Dr. Paul A., Los Angeles Junior College, Los Angeles, Calif.
Roth, Mr. George K., 1320½ Montana St., Los Angeles, Calif.
Roth, Prof. Joseph M., College of Mines and Metallurgy, El Paso, Tex.
Reidenbach, Dr. Clarence, 1st Congregational Church, Oakland, Calif.

Saenger, Dr. Gerhart H., International House, 500 Riverside Drive, New York, N.Y.

Sibley, Mr. Edward Carroll, 2732 McConnell Drive, Los Angeles, Calif.
Skulsky, Mr. Samuel, 415 Lefferts Ave., Brooklyn, N.Y.

Tenney, Dr. E. V., State Teachers College, Fresno, Calif.
Thalheimer, Mr. A., Roxbury Place, Mt. Washington, Baltimore, Md.

Urban, Prof. Percy L., Berkeley Divinity School, New Haven, Conn.

Welch, Mr. E. Parl, Occidental College, Los Angeles, Calif.
Wilson, Dr. David H., Faculty Club, Harvard University, Cambridge, Mass.
Williams, Dr. J. A., Fullerton Junior College, Fullerton, Calif.

THE LIBRARY OF THE
APR 2 - 1938
UNIVERSITY OF ILLINOIS